

Australian



\$2.00

MODEL RAILWAY

OVER
ELECTRONICS

Magazine

OCTOBER, 1983.

ISSUE 122. Vol.11. No.5

Oker
IN THIS ISSUE:

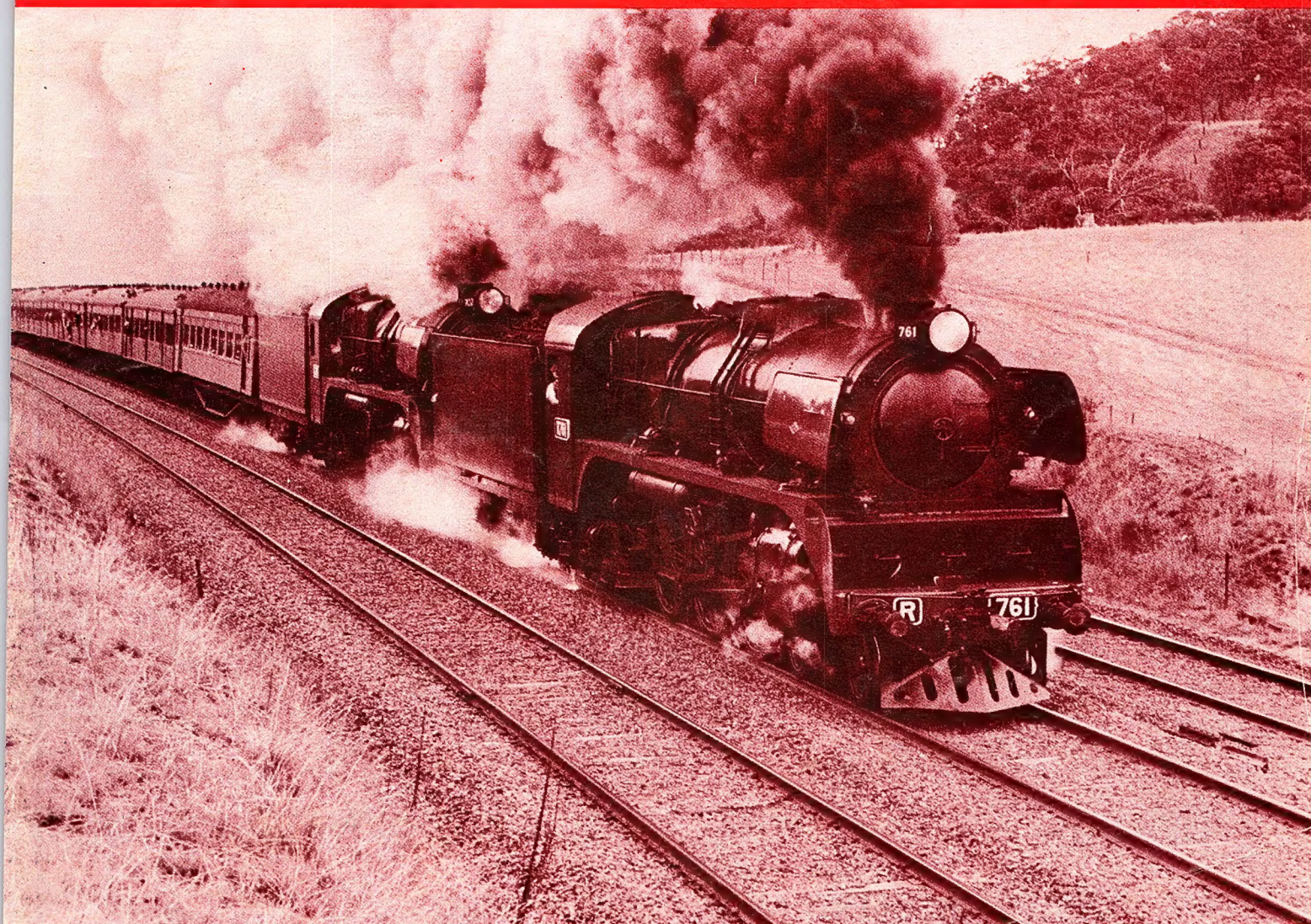
Model Railway Layout
Built in a Classroom

O Scale Ringfield Motors

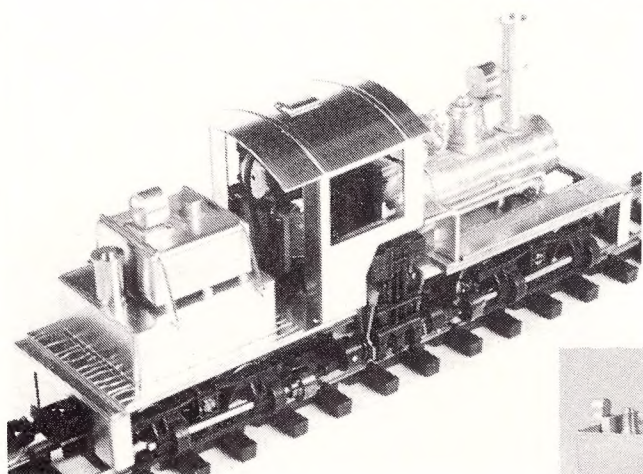
V.R. T Vans —
Advertising Signs

N.S.W.R. 'CR' Passenger Car

Discussion on the Problems
of Modelling
Australian Railways
in HO Scale



NEW ARRIVALS — NOW ON THE 'READY TRACKS' . . .

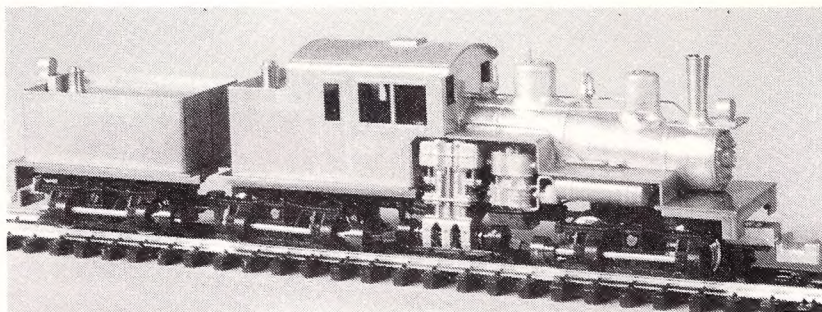


The first production Shay Geared Locomotive for N gaugers! . . . Built in Japan to the order of Lambert Associates. Styled on the Pacific Coast 3-truck type.

PRICE: \$273.00.

Loggers working in HO_{N3} gauge have long wanted a low cost Shay . . . Now comes the Michigan-Californian Logging Co. 2-Trucker, to fill the bill! Of Japanese manufacture, with simplified detail to match its keen price, this Lokie is capable of negotiating curves down to 150mm radius.

PRICE: \$265.00.



FROM THE SHOPS OF MANTUA . . . — HO 2-6-6-2 ARTICULATED LOGGING LOCOMOTIVE KITS . . .

These free-lanced, plastic logging Locomotive Kits will be welcomed by loggers looking for keenly priced articulated motive power and prepared to face the necessary task of assembly.

All drivers geared. Minimum radius: 18".

Kit No. 524: HO 2-6-6-2 Tank Loco.

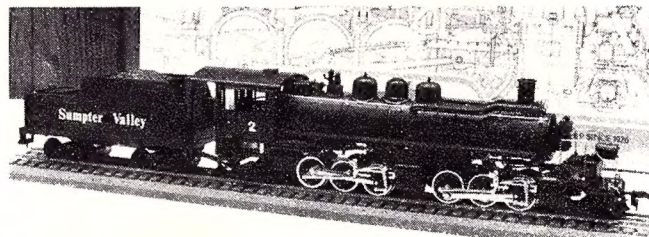
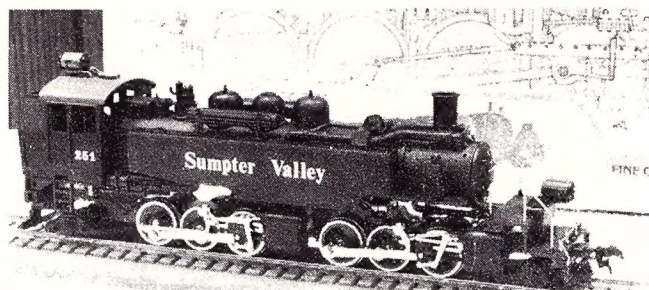
(Sumpter Valley, Uintah, Weyerhaeuer).

PRICE: \$127.00.

Kit No. 525: HO 2-6-6-2 Loco & Tender.

(Uintah, Weyerhaeuser, Cherry Valley Logging, Deep River logging).

PRICE: \$149.00



LWD22 — SPECIAL CLEARING TRACK — MID-YEAR 'BRASS' SALE

To make way for new stocks, we are now offering the following models, whilst stocks remain, at the discounted prices shown:-

	RETAIL PRICE			RETAIL PRICE	
	WAS	NOW		WAS	NOW
HO New Haven '8200' Lightweight Steel Coach by Cust. Brass	40.50	37.30	HO EMD GP-30 Diesel Locomotive, Standard Version, by Alco Models	312.00	222.00
HO New Haven Lightweight Steel Grill Car.Coach by Cust. Brass	40.50	37.30	HO EMD GP-30 Diesel Locomotive, P.R.R. Low Hood, by Alco Models	340.95	243.00
HO Erie 2-Car Set: Modernised Coach & Diner by Nik. Plate Prod.	75.40	59.00	HO EMD GP-30 Diesel Locomotive, High Hood Version, by Alco Models	312.00	222.00
HO 0-8-8-0 P.R.R. 'C0-2' Loco & Tender by Nickel Plate Prod.	444.95	345.00	HO N. & W. 'JAWN HENRY' Steam Turbine with two Tenders by Alco Models	1286.00	895.00
HO N.Y.C. 'S-3' Electric Locomotive by Custom Brass	227.00	198.00	HO North Shore #458 4-Truck Electric Loco., by Mil. Car Works	351.35	250.00
HO P.R.R. 'FF-1' Electric Locomotive by Custom Brass	417.00	305.00	HO 4-6-2 P.R.R. 'K-4' Modern Loco. & Tender by United	548.95	389.00
HO N. & W. Wood Caboose by Westside Models	70.95	62.00	HO 2-8-0 Reading 'I-10sa' Loco. & Tender by Gem Models	541.00	385.00
HO N. & W. Steel Caboose by Westside Models	70.95	62.00	HO U.P. #900005 Wedge Snow Plow by Overland Models	94.95	67.50
HO 2-10-2 Sante Fe '3010' Loco. & tender by Westside Models	266.00	215.00			
HO DL-109 A Unit Diesel Locomotive by Hallmark Models	312.00	222.00			
HO Amtrak Coach by S. Soho	64.65	46.00			
HO N.Y.C. 24' Wood Caboose, by Alco Models	83.00	59.00			

SOLE AGENT & IMPORTER
THE MODEL DOCKYARD PTY. LTD.

216-218 SWANSTON STREET, MELBOURNE. 3000. PHONES: 663 3505 & 663 4792.

SCRATCHBUILDERS

Have you seen our range of scratchbuilders materials and detailing items. Some are listed below:-

DETAILING PARTS

HO Scale

Australian Models

D1001 Buffers	Pkt of 16	\$2.00
D1002 Brake Cylinders	Pkt of 6	\$1.55
D1003 Air Tank	Pkt of 6	\$1.55
D1004 Truss Rods	Pkt of 6	\$1.80
D1005 Brake Handles	Pkt of 10	\$2.00
D1006 Battery Boxes	Pkt of 3	\$1.80
D1007 Circuit Boards	Pkt of 3	\$1.80
D1008 Battery Box - Circuit Board set	set	\$1.80
D1009 Handrail Wire 20"	Pkt of 10	\$3.50
D1010 Handrail Wire 15"	Pkt of 5	\$2.00
D1011 Wire for Underbody Detail (handrail) etc	Pkt of 5	\$1.80
D1012 Brass Bearings	Pkt of 30	\$3.50
D1013 Brass Buffers	Pkt of 20	\$2.00
D1014 Bogie Bolster	Pkt of 10	\$2.00
D1015 2AA Bogies	Pair	\$1.40
D1016 Plastic 10.5mm spoked wheels	ea	\$.30
D1017 Plastic 10.5mm disc wheels	ea	\$.30
D1018 Metal 10.5mm spoked wheels 23.8mm axle	ea	\$.95
D1019 Metal 10.5mm disc wheels 23.8mm axle	ea	\$.95
D1020/18 Metal 10.5mm spoked wheels 23.8mm axle	Pkt 10	\$8.50
D1021/19 Metal 10.5mm disc wheels 23.8mm axle	Pkt 10	\$8.50
D1022 Metal 10.5mm spoked wheels 26mm axle	ea	\$.95
D1023 Metal 10.5mm disc wheels 26mm axle	ea	\$.95
D1024/22 Metal 10.5mm spoked wheels 26mm axle	Pkt 10	\$8.50
D1025/23 Metal 10.5mm disc wheels 26mm axle	Pkt 10	\$8.50
D1026 Handbrake Handles	Pkt of 30	\$3.50
D1027 Brake Cylinder with Tripple Valve	Pkt 6	\$2.85
D1028 Load Compensating Cylinder	Pkt 6	\$2.85
D1029 Air Tank	Pkt 6	\$2.85
D1030 Wagon Ladder (steps, etc.)	Pkt 6	\$2.85

DATA SHEETS

C36 Roundtop, C36 Belpaire, No.1, U105, NN(1027), C35, D55, D57, C38, AD60, D59, 40 class, 44 class, 48 class, CPH/CTH rail motor, CBC/HX & BWH/RU.	per sheet	\$2.00
---	-----------	--------

All prices shown are subject to change without notice.

BRASS LOCOMOTIVES

We are taking orders for:-

CASULA C32 class 4-6-0 locomotive, exp Nov/Dec '83

TRAX Z12 class 4-4-0 loco with Baldwin Tender. Dubs or Atlas version, exp Oct '83.

TRAX C34 class 4-6-0 locomotive, exp Feb '84.

BROAD GAUGE MODELS V.R. A² 4-6-0, exp May '83.

BROAD GAUGE MODELS V.R. X class, 2-8-2, exp late '83.

ALCO V.R. T class diesel, exp late '83.

BERGS BRASS MODELS If in stock. New & Second Hand.

MODEL DOCKYARD MODELS If in stock. New & Second Hand.

CASULA HOBBIES
PHOENIX PLAZA
MACQUARIE STREET,
LIVERPOOL. 2170.
Ph (02) 602 8640



McBEES

HOBBY CENTRE Pty. Ltd.

POSTAL ADDRESS:

P.O. BOX 144
COBURG, 3058
VICTORIA

TELEPHONE:
(03) 478-0038

NARROW GAUGE - HOm - from BEMO

BEMO produce a range of superb little Swiss and German narrow gauge models - the Swiss (RhB) Ge 6/6 'Krokodile' electric is the finest 'out of the box' loco we have ever seen and is well worth the \$173.60 price. All BEMO models are available in HOm (metre gauge) and HO2.5. Of interest to modellers of 3'6" systems is the fact that HOm track has a gauge of 12mm - the same as TT. BEMO HOm track is nickel silver, code 70 and weathered. Price is \$4.05 per metre. Points are available at \$10.85 each. Double Slip (\$26.60) points will be available later this year. BEMO track is a McBees stock item, locos and rolling stock can be ordered through our 'import-to-order' service.

NORTHEASTERN SCALE MODELS INC.

In stock now is Northeastern's range of HO Scale 'shapes' at \$3.00 per pack. Each piece is 11" long, number in brackets is quantity per pack.

ANGLES:-	1/32" (9)	:: 1/16" (8)	:: 3/32" (8)	:: 1/8" (7)
TEES:-	1/32" (9)	:: 1/16" (8)	:: 3/32" (8)	:: 1/8" (7)
ZEES:-	3/64" (9)	:: 1/16" (8)	:: 3/32" (8)	
CHANNELS:-	1/16" (8)	:: 3/32" (8)	:: 1/8" (7)	
I BEAMS:-	1/16" (8)	:: 3/32" (8)	:: 1/8" (7)	
COLUMNS:-	1/16" (8)	:: 3/32" (8)	:: 1/8" (7)	

THE VR 'C' VAN

The second offering in our VR brass, ready-to-run rolling stock programme will be the 'C' guards van. The 'C' Van will be produced for us by THE MODEL COMPANY of New Zealand. It will be available in two versions - with and without the side vision extensions. (These side vision extensions allow the guard to make observations along the side of the train - not just at roof level). The version without the side vision extension has dog box doors. The model will feature many lost wax cast brass detail items. The bogies will be brass castings and will be complete down to the VR on the axle box covers. As with the 'Z' Van, we will market some of the detail items used on the 'C' Van separately. The 'C' Van will be painted and will include decals. Price .. \$89.95. Production will be limited. Delivery from New Zealand will be on a 'batch' basis with the first 'batch' due in October and subsequent 'batches' to follow at 6 to 8 week intervals. No deposit is required.

OTHER VR PROTOTYPE MODELS

We are now accepting deposits for Broad Gauge Models 'X' Class 2-8-2 Steam Loco. and Australian Locomotive Companys 'T' Class diesel. Price for the 'X' Class is \$415.00 before December 31st. and \$440.00 after that date - factory painting is an extra \$35.00. The 'T' Class is expected to be \$275.00. A deposit of \$75.00 is required for each loco. We have just received BGM's latest injection moulded plastic kit, the VR 'U' Van. Price is \$7.95. A 'UR' version will be available soon.

PLEASE NOTE A CHANGE OF OUR TRADING HOURS

Our shop at 535 Plenty Road PRESTON will be open at the following times:

Friday 4:00pm to 9:00pm.

Saturday 9:00am to 1:00pm.

Our Mailorder and Import-To-Order service will continue unchanged.

IMPORT-TO-ORDER from WALTHERS



We have now installed a Microfiche reader to enable us to make use of WALTHERS SAS Stock Advisory Service. Each month WALTHERS supply us with information recorded on microfiche which gives complete details, including price changes, expected delivery dates and availability for over 44000 different Model Railway items carried by them. Customers who buy their Walther's Catalogue from McBees also receive (at no charge) the monthly Craft Train News which contains details of new releases etc. All this plus our computer to computer ordering (airfreight from the USA) service gives Australian modelers the same 'freedom of choice' as their US counterparts. Due to the recent and large devaluation of the Australian dollar our price on imported products has increased by about 12.5%

McBEES

WALTHERS
PARTICIPATING
WALTHERS DEALER



Cards above (and VISA) accepted. Include number, expiry date and your signature. Do NOT send CASH.

All prices shown are subject to change without notice. Postage at cost.

BGB BODIES AUGE ROAD

Australian Prototype Body Kits as seen running through South Australia.



CUSTOM DECAL SERVICE for the freelance Modeller. Enquiries to B.G.B.

NEW RELEASES

NEW KITS

BK 34. Australian National VFX Louvre Van \$16.20
BK 35. VicRail 'VHGY' Bogie Grain Hopper \$14.00

NEW DECALS

49. NSW Double blue arrows on white background. \$ 1.10
54/C2. V&ANR Overland basic set No.2 \$ 1.75
55/C4. V&SAR, V&ANR OVERLAND sets incl., Club car, sleepers and RBJ \$3.99
57. NSW private owner emblems for four wheel coal hoppers. Set No.1. \$ 1.10
58. As for above (No.57) Set No.2 \$ 1.10

FROM THE FOLLOWING OUTLETS

South Australia:

Bridglands Hobbies
The Model Centre
West Coast Model Supplies
Glenelg Trains & Tronics

Queensland:

Import Hobbies

Australian Capital Territory:

Peter Pan

Victoria:

Box Car Hobbies
Branch Line
The Engine Shed
Hobbycraft/Barwoods
Hobbyline
The Loco Shed Inglewood
McBees Hobby Centre
Morwell Electronics
Train World
Viaduct Hobbies

New South Wales:

Casula Hobbies
Keith Hudson Modellers World
Punchbowl Hobby Centre
St George Hobbies
Toymen Imports
Vic Barnes Hobby Centre

MODELLERS

Large SAE for current price list.

All kits in continuous production.

P.O. BOX 137,
DAW PARK, 5041

TRADE ENQUIRIES

P.O. BOX 137,
DAW PARK, 5041
Phone: (08) 297 8524
Office Hours 12-2pm S.A. time.

BACK ISSUES

The following issues are available subject to prior sale:-

No. 1 — April/May, 1963 (Reprint)
Priced at 25c a copy, plus postage.

No. 39 — July/August, 1969
Priced at 30c a copy, plus postage.

No. 80 — September/October, 1976
Priced at 60c a copy, plus postage.

No. 83 — March/April, 1977
No. 86 — September/October, 1977
No. 87 — November/December, 1977
The above issues are priced at 70c a copy, plus postage.

No. 88 — January/February, 1978
No. 89 — March/April, 1978
No. 91 — July/August, 1978
No. 92 — September/October, 1978
No. 93 — November/December, 1978
No. 94 — January/February, 1979
No. 95 — March/April, 1979
No. 96 — May/June, 1979
No. 97 — July/August, 1979
No. 98 — September/October, 1979
No. 99 — November/December, 1979
The above issues are priced at 90c a copy, plus postage.

No. 100 — January/February, 1980
No. 101 — March/April, 1980
No. 102 — May/June, 1980
No. 103 — July/August, 1980
The above issues are priced at \$1.00 a copy, plus postage.

No. 104 — September/October, 1980
No. 105 — November/December, 1980
No. 106 — January/February, 1981
No. 107 — March/April, 1981
The above issues are priced at \$1.20 a copy, plus postage.

No. 108 — May/June, 1981
No. 109 — July/August, 1981
No. 110 — September/October, 1981
No. 111 — November/December, 1981
The above issues are priced at \$1.50 a copy, plus postage.

No. 112 — February, 1982

The above issue is available at \$1.60 a copy plus postage.

No. 113 — April, 1982
No. 114 — June, 1982
No. 115 — August, 1982
No. 116 — October, 1982
No. 117 — December, 1982
No. 118 — February, 1983

The above issues are available at \$1.80 a copy plus postage.

POSTAGE

One copy Within NSW 60c Outside NSW 70c Overseas 75c.
Two copies Within NSW \$1.00 Outside NSW \$1.20 Overseas \$1.40.
Larger parcels

No. of Copies	3-4	5-9	10-24	25 & over
Sydney Metro	2.00	1.65	1.90	2.20
NSW	2.00	2.25	2.45	2.85
Victoria	2.40	3.60	4.50	5.40
SA & Tas.	2.40	4.00	5.25	6.50
NT & WA	2.40	4.85	6.95	9.05
Qld	2.40	3.85	4.95	6.45
Overseas	2.80	4.40	7.25	10.00

Please nominate a second choice in case of non availability of the required issue.

Please list issues required on a sheet of paper separate from any other matter, complete with printed postage instructions (i.e. Name and Address).

If including stamps as part payment, please ensure that the face value of each stamp does not exceed the standard postage rate of 27c.

Please allow at least 21 days for the delivery of goods.

Post your order to:

SCR PUBLICATIONS
PO BOX 235,
MATRAVILLE, NSW 2036



RAILWAY SPECIALISTS
EXPERT REPAIRS

CAN YOU OPERATE TWO TRAINS
AUTOMATICALLY ON THE SAME
TRACK, WITHOUT ANY SWITCHES
OR RELAYS??

YES
WITH E.T.C.
YOU CAN

E.T.C. does it electronically, leaving your hands free to operate other trains.

All you have to do, is: Link the two transformer wires to the E.T.C. unit, another two wires to insulated sections and wire your light signal. Like MAGIC, two trains operate simultaneously and the signal light changes as well.

E.T.C. is a TRRAINTASIA EXCLUSIVE for only \$14.95 plus \$1.00 P&P. (AMRI Light signal No. 147 \$4.35 extra). All units are pre-tested and supplied with full instructions.

MAIL ORDERS: P.O. BOX 86, MERMAID BEACH

2480 GOLD COAST HIGHWAY,
MERMAID BEACH, 4218 — Ph.552103

FLEISCHMANN

BILL WEBB MODEL RAILWAYS

Established 1975

for reliable efficient service throughout Australia
SPECIALIST IN CONTINENTAL EQUIPMENT
Refer Catalogue list below for brands available

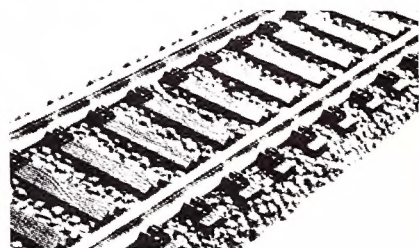
READY BALLASTED HO/OO and N TRACK

For all popular makes of Trains . . .

YES!!!! FLEISCHMANN track is ready ballasted . . . even the FLEXIBLE TRACK.

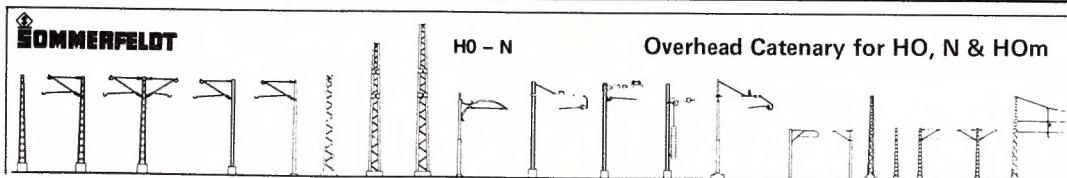
Features:-

- * Built in ballast - for realism
- * Wood grained sleepers and prototypical rail chairs
- * Full profile code 100 rail with excellent current capacity from special nickle-silver material.
- * Special rail-joiners to lock rails together.
- * Geometry of their track designed to use less pieces.
- * Famous "THINKING POINTS" with built-in ballast.
- * Clip on motors for above or below board mounting
- * Available in Set-track pieces or flexible
- * FLEISCHMANN Ready-ballasted track joins to other makes.
- * Rugged construction.

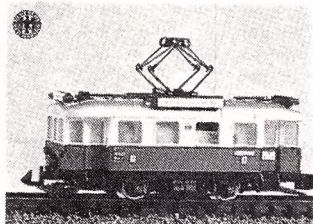


For your Track sample send:-
\$1.50 specify gauge.

Write today for colour FLEISCHMANN
Catalogue . . . JUST \$3.50 posted.



SOMMERFELDT the prototypical catenary system for realism. Metal masts — Trellis, H section and tapered round.
Fine scale copperplated wire various lengths (10 in HO & 6 in N). Catalogue \$3.50 posted.



ARNOLD 'N'

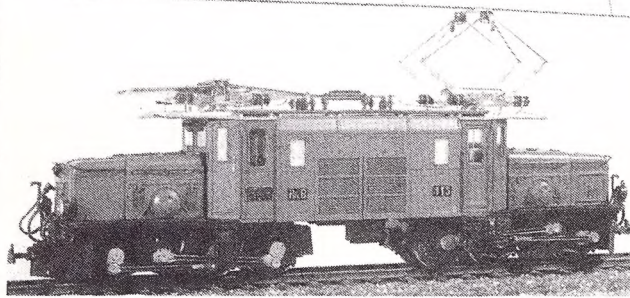
ARNOLD N gauge TRAMS
with Sommerfeld Tram Catenary system
No. 2960 powered, Red/Cream, \$96.95
No. 2972 Trailer for 2960 . . . \$22.50
Also available in Green/Cream



- 1) of **SMOKE UNITS** for most makes of HO/OO locomotives. Factory & House chimney units.
Realistic **PUFFING** action !
- 2) **SPECIAL — CLEANING FLUID** in a bottle or spray. Will not harm plastic or cause short circuit.
Removes dirt from track, wheels & electronic components. Send 27c for brochure & price list.

BEMO

BEMO — HOe and HOm — Just arrived
RhB "Krokodils" - Ge 6/61 - Brown
No. 1055 HOe \$188.35 - 1255 HOm \$188.35
Post free, Send \$4.50 for NEW 1983 Catalogue



REPA <<-NEW>>

REPA ELECTRO— MAGNETIC UNCOUPLER for HO & N
For almost all types of European couplings.
Fit REPA anywhere on your layout.
Now in stock — write for details.



CATALOGUES

FLEISCHMANN — HO and N	\$3.50	METROPOLITAN Swiss N gauge brochure . .40
BRAWA — HO, N,Z operating access., . .	3.50	SOLOTA — Multi-Train Control HO.LGB . .30
MARKLIN — HO, Z, No.1	3.50	SEUTH Smoke Generators
FALLER — HO, N.Z. Kits	3.00	HO, O. LGB. No.127
KIBRI — HO.N.Z. Kits	2.50	HELJAN — HO and N Kits 1.80
SOMMERFELDT —		ROSKOPF — HO Military Vehicles . . . 1.00
HO.N Overhead Catenary	3.50	VOLLMER — HO, N and Z Kits 4.30
HAG — HO. of Swiss prototype	2.00	EUROPEAN Model Railway Book List . . .27
METROPOLITAN — European HO brass	21.50	BEMO — HOe, HOm - 4.50

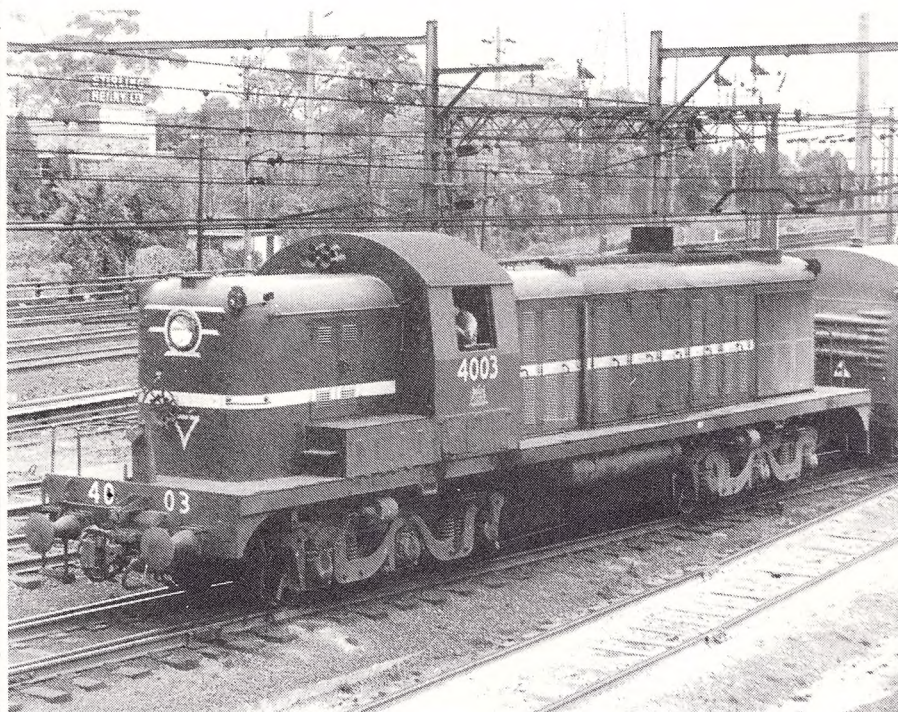
Bill Webb

**AUSTRALIA WIDE
MAIL ORDER**

P.O.Box 68, FIGTREE 2525
Phone: (042) 29 5824
Showroom: 21 Meares Av. Mangerton
Inspection by appointment only

COMING MID-DECEMBER, 1983

**PREMIUM QUALITY MODELS OF
NSWR 40 CLASS DIESEL LOCOMOTIVE**



Another outstanding model in HO scale from Samhonga with all the attention to detail and good running we have come to expect from a first quality model.

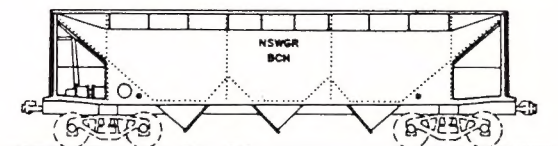
**ADVANCE ORDERS NOW BEING TAKEN
THE PRICE IS \$325.00**

**FOR ORDERS FULLY PAID BY DECEMBER, 1983
THE PRICE WILL BE REDUCED TO \$295.00**

SORRY NO BANKCARD ON REDUCED PRICE

MANSFIELD HOBBIES
100 Pacific Highway,
WAITARA. 2077
Phone (02) 487 3188.

ASK FOR



**AR
KITS**

NSW SRA 'BCH' (NHDA) Coal Hopper Kit
NSW SRA 'GLV/GLX' (NLGF/NLGX) Louvre Van Kit
NSW SRA 'BWH' (NGBA) Wheat Hopper Kits to be released mid 1983.
BCH KIT NOW INCLUDES DECALS

r.r.p. \$6.25
r.r.p. \$4.95

**INJECTION MOULDED STYRENE
BODY KITS
AVAILABLE NOW
AT YOUR LOCAL HOBBY SHOP**

FOR TRADE ENQUIRIES
AR KIT Co.
PO Box 31
NORTHGATE 4013

CONCORD HOBBIES

*WE SPECIALISE IN CONTINENTAL MODELS
FLEISCHMAN, LIMA ETC, and wont be
undersold
on ROCO and LILIPUT*

LIMA Co-Co Conversion Kits only \$ 5.50
Old Type

LIMA XPT Power car with lights \$47.00
LIMA XPT 1st class open coach \$20.00
LIMA XPT Trailer/guard 2nd cls. \$20.00
LIMA XPT Non powered dummy loco \$26.00

**WE CAN NOW ALSO OFFER
ROSKOPF MINIATURE MODELS IN HO**

KATO N GAUGE

French TGV 6 car set \$110.00
DB Class 86 2-8-2 Tank loco \$ T.B.A.
*And many more locos and rolling stock
Rolls Royce quality at Ford's prices*

Green Max Building Kits in N

**MAIL ORDER WELCOME
SEND S.S.A.E.**

CONCORD HOBBIES
43 CURRAWANG STREET,
CONCORD WEST. 2138
(02) 73 5434

Now Also At:-

**134 Darlinghurst Road,
DARLINGHURST. 2010
Saturdays open till 3pm.**

**OPEN SUNDAYS AT PADDY'S MARKETS
STALL No. 849-850**

EXPRESS MAIL ORDER OO/HO & N

STOCKS INCLUDE -

Peco - Rivarossi - Ratio
Roundhouse - Lima - Roco
Superquick - Minitrix - Merten
Merit.

AIDS TO CONSTRUCTION -

Romford HO/OO wheels, axles, gear
sets, crankpins etc.. Sentinel HO loco-
motive & rolling stock wheels & fit-
tings. Small brass BA screws & nuts -
hand taps - drills - styrene sheet
etc..

**BRITISH - AMERICAN - EUROPEAN
AUSTRALIAN PROTOTYPE.**

Please write for stock/price lists & advise if
HO/OO or N details required. Please print
your name and address.



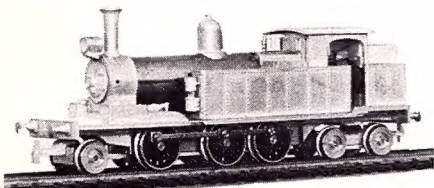
PJP PRODUCTIONS
SINCE 1938

20 Daly Street,
GISBORNE, Victoria 3437
Phone (054) 28 2170

Sentinel

MODEL RAILWAY PRODUCTS

**PROUDLY MADE
IN AUSTRALIA**



This photo shows the assembled chassis and the main body castings of the Sentinel Z20 Class. Other parts have yet to be fitted.

HO Scale N.S.W. Z20 LOCO KIT

There have been a couple of unavoidable delays in the production of the Z20 kit which means that release has had to be deferred until early Summer.

HO/OO WHEELS

16.5mm gauge Wheel Sets to A.M.R.A. standards. Nickel silver tyres and stainless steel pin point axles.

9271 8-spoke, 10.5mm diameter
9272 Disc Wheels, 10.5mm diameter
9275 Disc Wheels, 9mm diameter, suit 'Rivarossi' & 'Roundhouse' US bogies.

\$2.40 2 axle set

A limited number of Sentinel 1 foot radius N gauge points is now available.

No. 3791 Right Hand
No. 3792 Left Hand

\$5.95 each

This is a last chance offer as these points are no longer in production.

HO/OO FITTINGS

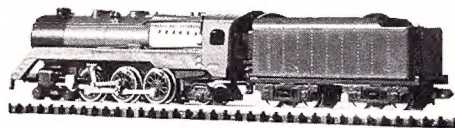
9208 NSWGR Buffers (ex Z20) (4)	1.15
9259 Z20 Compressor, Whistle, Safety Valve, Brake Cylinder - 1 each	1.25
9260 NSWGR Loco Compressor, 1930 Z20 style (4)	1.25
9265 Chimney for Z20	1.25
9266 Steam Dome for Z20 Loco	1.25
9267 Whistle for Z20 Loco (4)	1.25
9268 Safety Valve for Z20 (4)	1.25
9269 Brake Cylinder for Z20 (40)	1.25
9270 Headlight for Z20	.60
9401 VR Single Phase Compressor	.50
9403 Steam Generator, Pyle Type	.60
9405 NSWGR Headlight for s/box front	.60
9406 Headlight, type 2, Hooded	.60
9407 Cross Compound Air Compressor	.75
9410 Headlight, type 3, USA style	.60
9412 Pilot/Cowcatcher, type 1	.95

N Scale N.S.W. C38 LOCO KIT

- * CHASSIS FULLY ASSEMBLED AND TESTED
- * TENDER BODY INJECTION MOULDED PLASTIC
- * KIT IS COMPLETE EXCEPT FOR PAINT AND TRANSFERS

\$115.00

AVAILABLE NOW



9423 Marker Lamps w/clear "lights" for aprons Pair	.95
9424 Marker Lamps w/red "lights" for aprons Pair	.95
9427 Marker Lamps electric type with clear "lights" Pair	.95
9428 Marker Lamps electric type with "red" lights Pair	.95
9429 Compressor, NSW single phase	.60
9433 Circular Fans for Diesels	.75
9436 Air Tank, shorter type	.75
9446 Bell & Bracket	.60
9461 Dummy Knuckle Couplers - 3 Pr	1.35
9462 Guards Lookout MHG Pair	1.25
9465 Vents & Flue for MHG - Set	.75
9466 End Platforms with steps	1.25
9470 3-piece Brake Gear Set	.95
9471 X2F Couplers with draft gear Pr	1.25
9472 X2F Couplers with bottom pockets & springs Pair	.95

FROM GOOD HOBBY SHOPS EVERYWHERE

OR FOR DIRECT SALE BY MAIL ORDER

INDI ENTERPRISES PTY. LIMITED

P.O. Box 415 ALBURY N.S.W. 2640

Manufacturers of "Sentinel Model Railway Products"

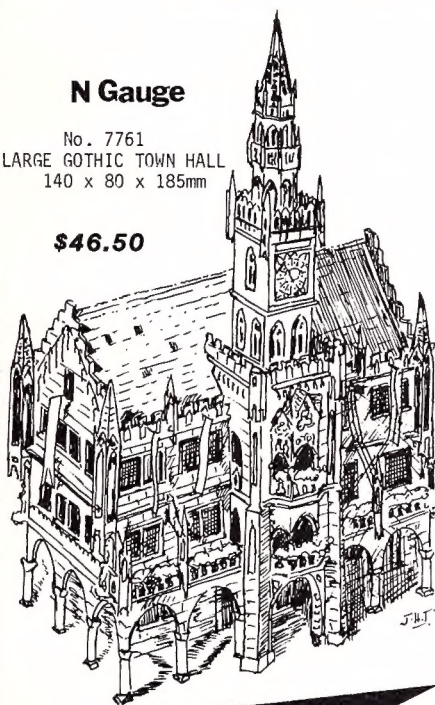
VOLLMER

EXCELLENCE IN PLASTIC KITS

N Gauge

No. 7761
LARGE GOTHIC TOWN HALL
140 x 80 x 185mm

\$46.50



some HO/OO lines

3730 Modern Metropolitan Station 640 x 140 x 100mm	\$39.50
3746 Old World Timber-framed House 100 x 85 x 145mm	18.50
3747 Old World T/F Drug Store 85 x 85 x 125mm	18.50
5526 Gasoline Storage Tank 122 x 122 x 115mm	12.95
5604 Warehouse 160 x 100 x 65mm	13.25
5716 Goods Platform with canopy 820 x 40 x 80mm	18.75

HO/OO

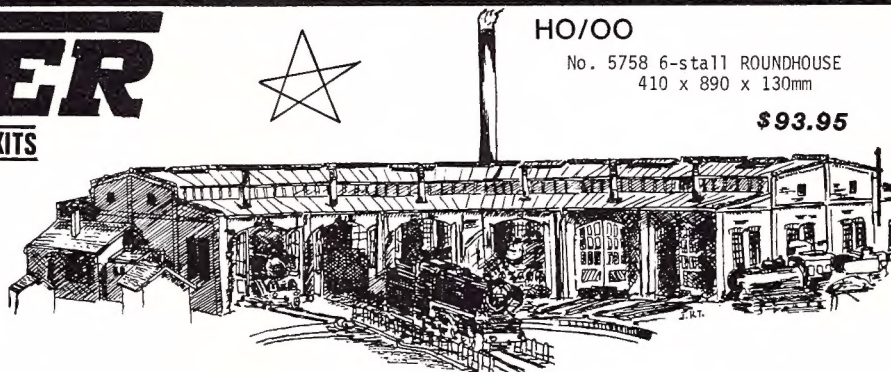
No. 3760 LARGE GOTHIC TOWN HALL
180 x 120 x 285mm

\$47.50

HO/OO

No. 5758 6-stall ROUNDHOUSE
410 x 890 x 130mm

\$93.95



New in N

No. 7736
Village Church
160 x 98 x 215mm

\$27.50



from good hobby shops everywhere

For Trade & General Enquiries:-

AUSTRALIAN MODEL CRAFT CO.

Box 118, P.O., Albury, N.S.W. 2640

Phone (060) 21 2473

AMC

DISTRIBUTED PRODUCTS

TO ALL RETAILERS: The prices set out or referred to herein are recommended prices only and there is no obligation to comply with the recommendation.

BOX CAR HOBBIES

MODEL RAILOLOGISTS

STOCKTAKING SPECIALS

	NORMAL	SALE.		NORMAL	SALE.
SCALE STRUCTURES BARBER SHOP INT. DET.	\$49.90	\$24.95	'N' NEVADA COUNTRY ENG. HOUSE	\$23.90	\$11.95
MAGNUSON MODELS 'HO' HIGHLAND STAT.	\$32.50	\$17.60	'N' RAND MINING DIST. JAIL & HOME	\$16.90	\$ 8.45
NEVADA COUNTRY N.G. ENGINE HOUSE	\$33.70	\$16.85	'N' RAND MINING DIST. MINE & REF.	\$21.10	\$10.55
S.P. MODELS 'HO' COVERED BRIDGE	\$19.70	\$ 9.85	'N' RAND MINING DIST. SHERRIF'S OFF.	\$13.90	\$ 6.95
FARM WATER TANK	\$18.40	\$ 9.20	'N' RAND MINING DIST. ORE STATION	\$18.40	\$ 9.20
DETAIL ASSOCIATES FOOTHILL STATION	\$49.90	\$24.95	'N' RAND MINING DIST. PHARMACY	\$22.50	\$11.25
SUYDAM MISSION STYLE STATION	\$ 9.80	\$ 4.90	'N' RAIL HEAD 'TURN OF CENT.' 45' PASS CAR	\$13.00	\$ 6.50
SUYDAM STORAGE WAREHOUSE	\$16.60	\$ 8.30	'N' RAIL HEAD 'TURN OF CENT.' 45' BAGGAGE	\$13.00	\$ 6.50
PERIOD MINIATURES UNION HOTEL	\$22.50	\$11.95	'N' RAIL HEAD M OF W. SPECIAL WAGONS	\$ 9.00	\$ 4.50
MUIR MODELS MABRY GRIST & SAWMILL	\$15.50	\$ 7.75	'HO' RED BALL BOX CAR SIDES		50C/Pair.

WHILE STOCKS LAST
P & P add 10%



ORDER YOUR VR 'X' CLASS
2-8-2 BY SAMHONGSA NOW
ON \$75 Deposit from
BOX CAR HOBBIES

mail order
laybys
trade-ins

BOX CAR HOBBIES

12 VICTORIA ST.
COBURG 3058
TEL.(03) 354-8519



QUALITY TRACK PRODUCTS

FLEX TRACK — 36" long	Per Bundle of 6 Lengths
HO CODE 55.....	\$27.55
HO CODE 70.....	\$27.55
HO CODE 83.....	\$28.95
HO CODE 100.....	\$28.35
HOOn3 CODE 55.....	\$27.55
HOOn3 CODE 70.....	\$27.55
HO/HOn3 DUAL GAUGE CODE 55.....	\$33.95
HO/HOn3 DUAL GAUGE CODE 70.....	\$33.95
HOOn2½ CODE 55.....	\$27.55
WEATHERED RAIL	Per Bundle of 36 Lengths
CODE 55.....	\$31.70
CODE 70.....	\$33.30
CODE 100.....	\$33.65
TIES	
HO REGULAR.....	\$7.90 Per Bag of 1000
HO TURNOUT.....	\$7.90 Per Bag of 500
HOOn3 REGULAR.....	\$7.40 Per Bag of 1000
HOOn3 TURNOUT.....	\$7.40 Per Bag of 500
RAIL JOINERS	
CODE 55.....	\$3.15 Per Pkt of 50
CODE 70.....	\$3.35 Per Pkt of 50
CODE 83.....	\$3.50 Per Pkt of 50
CODE 100.....	\$2.65 Per Pkt of 48
RAIL SPIKES	
SMALL.....	\$4.40 Per Pkt of 1000
MEDIUM.....	\$5.65 Per Pkt of 800
TRACK GAUGES	
HO CODES 55 — 70 — 100.....	\$3.40 Each
HOOn3 CODES 55 — 70.....	\$3.40 Each

MAIL ORDERS — Under \$20 please
add sufficient to cover post. Over
\$20 post free.

Prices are subject to change without
notice.

As at the advertising deadline all
items listed were in stock.

SPECIALISING IN HO/OO SCALES

• ROUNDHOUSE • ATHEARN • MEHANO •
LIMA • RATIO • CAMCO • MODEL POWER •
SHINOHARA • LOCOMOTION • EDA ELEC-
TRONICS • PECO • TRAX

Sentinel & Prototype fittings. Romford wheels,
crankpins & gearsets. Styrene sheet. K&S
metal. ECM motors. AMRI accessories. Mn'J
decals. Badger air brushes. PMH bogies.
Kalmbach books. Merten figures.

• KADEE • FLOQUIL • POLA • HELJAN •
KIBRI • HUMBROL PAINT

OPEN UNTIL 5.00pm SATURDAYS

Trading Hours:

Tuesday to Friday 9.00am—5.30pm (until 8 Thurs)

Saturday 9.00am—5.00pm

Closed Sunday & Monday

ST. GEORGE HOBBIES



504 ROCKY POINT ROAD
SANS SOUCI, N.S.W. 2219
Phone (02) 529-9809

LAY-BY

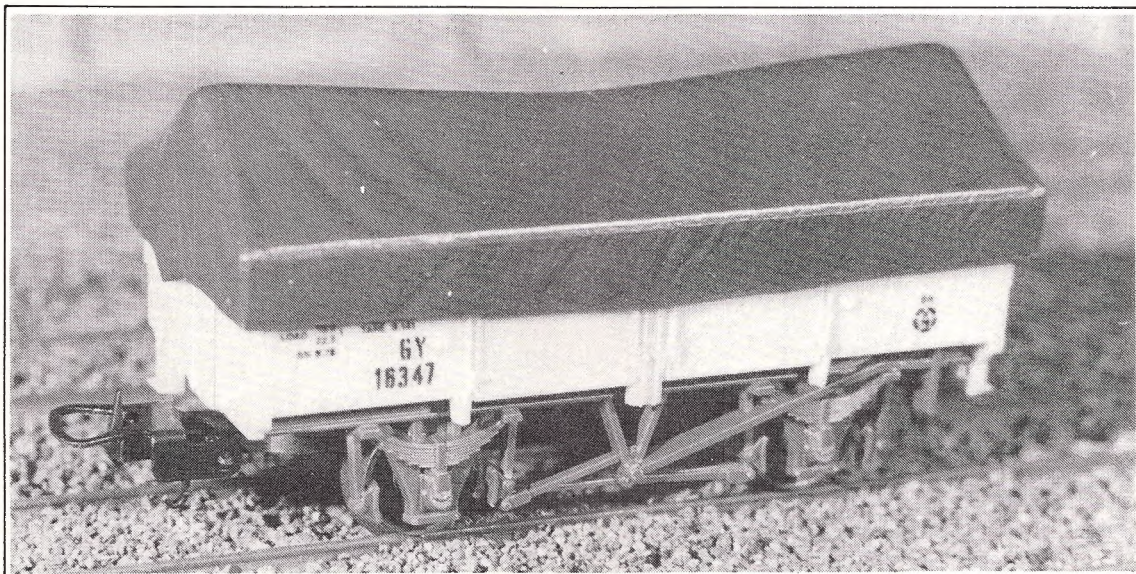




LIMA

Number one in the world of model railways.

The latest addition to the lima range of australian prototypes

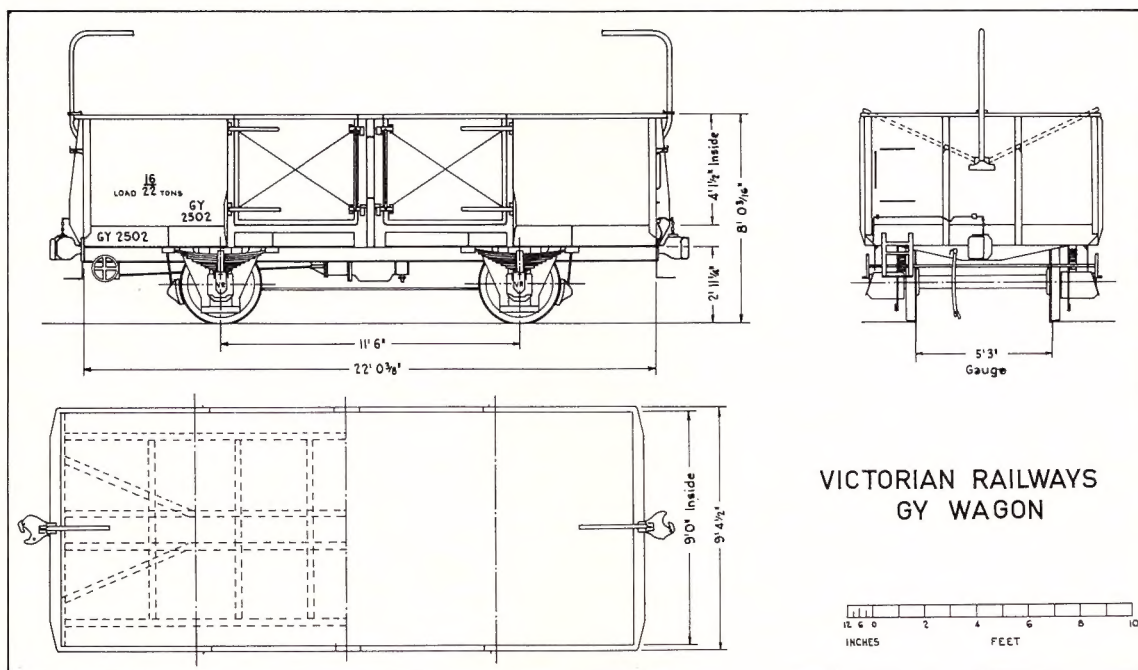


G.Y. WAGON.

CAT No 303522

AVAILABLE NOW

PRICE APPROX \$6.75



VICTORIAN RAILWAYS
GY WAGON

- **Removeable tarpaulin**
- **Detailed underframe**
- **Finely detailed lettering**
- **Correctly coloured**

**ALSO AVAILABLE : 303522 - 03 TRIPLE PACK CONTAINING
THREE GY WAGONS AT A SAVING OF 10 PER CENT**

AUSTRALIAN AGENTS SOUTHERN MODEL SUPPLIES PANORAMA SOUTH AUST.

ADVERTISERS INDEX

AMRA — N.S.W. Branch Exhibition	60
AMRM — Back Issues	4
AMRM — Subscriptions	62
AR Kits	6
Australian Locomotive Company	50, 54
Australian Model Craft	
— Sentinel, Vollmer	7
— Peco, Ratio	64
Australian Racing Motors	52
Back Issues — AMRM	4
Bill Webb	5
Box Car Hobbies	8
Broad Gauge Bodies	4
Broad Gauge Models	53
Casula Hobbies	3, 49
Chaucer Hobbies	50
Christine Hicks	50
Concord Hobbies	6
Electrotren	59
F & G	62
Faller	51
Fleischmann	5
Fred Fox	52
Hobby Yard	56, 57
Import Hobbies	58
J & J Hobbies	60
Koodak Jewellers Supplies	52
LGB	54
Lima	9
Locomotive Workshop	52
McBees Hobby Centre	3
Mansfield Hobbies	6
Mainline	61
Main West Models	48
Model Dockyard	2
N.S.W. School Railway Clubs Association	48, 52
P.J.P. Productions	6
Preston Hobby Modelle	50
Punchbowl Hobby Centre	54
Rail Tees	54
Red Heart Souvenirs	52
Southern Models	9
St George Hobbies	8
Subscriptions — AMRM	62
Tempest Electronics	55, 60
Traintasia	4
Train World	58
Western Model Railway Supplies	48

DIARY

EXHIBITIONS

BUNBURY — Western Australia. September 4, 5 1983 at the Bunbury Police and Citizens Youth Club. Further details from Secretary PO Box 121, Bunbury 6230. Organised by the City of Bunbury Lions Club.

GOSFORD — N.S.W. September 17, 18 at the Gosford Primary School. Open 9am-6pm (Sat), 9am-4pm (Sun). Proceeds to aid the Central Coast Branch of the Smith Family.

SYDNEY — N.S.W. October 1, 2, 3 1983 at the Royal Agricultural Showgrounds, Driver Avenue, Moore Park. Open 10am-8.30pm (Sat), 10am-6pm (Sun, Mon). Admission \$3/\$1. Organised by the N.S.W. Branch of the Australian Model Railway Association.

BOWRAL — N.S.W. October 8, 9. Admission \$1/50c. Organised by the Berrima District Model Railway Club.

ADELAIDE — South Australia. October 8, 9, 10 1983 at the Regency Park Community College. Open 10am-6pm each day. Admission \$2/50c. Details from T.Searle on (08) 212 7099 or (08) 332 6422 a.h.

GLEN WAVERLEY — Victoria. October 15, 16 at Treseder Hall, Glen Waverley High School, O'Sullivan Road, Glen Waverley. Open 8.30am-9pm (Sat), 9am-5pm (Sun). Admission \$1.50/60c. Further details C.J.Cochrane (03) 729 7018. Organised by the Glen Waverley Model Railway Club.

BATHURST — N.S.W. December 3 and 4 1983 at the Bathurst Civic Centre. Open 10am-6pm (Sat), 10am-4pm (Sun) Admission \$2/\$1/20c. Organised by the Central West Railway Modeler's Association.

DRUMMOYNE — N.S.W. January 28, 29, 30 1984 at the Birkenhead Point Shopping Complex, Victoria Road, Drummoyne. organised by the Epping Model Railway club.

CONVENTION

HAMILTON — NEW ZEALAND. April 20-23 at Te Rapa Racecourse. Details for the 1984 Great Waikato Convention can be obtained from PO Box 10318 Te Rapa, New Zealand.

AMRM

Editor	Managing Editor
Allan Brown	Bob Gallagher
Management Assistant	Allan Thornley
Typist	Niki Verdich
Photographer	Graham Ball
Illustrator	Ian Thorpe
Production Assistants	Max Burke, Ross Hurley
Layout	John Casey, Bob Gallagher
Distribution	Trevor Moore
Back Issues	John Casey
Subscriptions	Ted Cole
Computer Programmer	Graham Davis
Commercial Liaison Officer	Graham Ahern

REGULAR CONTRIBUTORS

Editorial Assistant (NSW)	Paul Rogers,
	Bradley Hinton, Stuart Liversey
Editorial Assistant (Vic)	Phil Jeffery,
	Ian Weickhardt, Peter Gibbs
Editorial Assistant (Tas)	Michael Dix
Editorial Assistant (Qld)	Max Chaseling
Editorial Assistant (SA)	Phil Curnow
Editorial Assistant (ANR)	Hugh Williams
Special Projects Writers	Phil Collins,
	Philip Dunn, Ross Hurley, David Bennett,
	Peter Eisenhut, Bob Merchant
Draughtsmen	Roger Johnson,
Dave Taylor, Ray Love, Bob Yule,	
	Adrian Compton, Howard Armstrong,
	Tony Parnell, Graeme Brown, Sam Hyde,
	Steve McElroy, Roger Porter, Peter Mustart
Cartoonist	Dick Stein

OCTOBER 1983 Issue 122, Vol.11. No.5 AT ISSN 0045-009X

The official Journal of the Southern Cross Model Railway Association (SCMRA) in Australia.

Published bi-monthly by SCR Publications of PO Box 235, Matraville, N.S.W. 2036 for the Southern Cross Model Railway Association. All rights reserved and all editorial matter copyright.

Registered for posting as a publication — Category B. Printed by Publicity Press NSW, 66 O'Riordan Street, Alexandria, N.S.W. 2015. All compilation, editorial and distribution work is carried out by voluntary labour on a non profit basis.

DISTRIBUTION: Subscriptions, SCMRA and SMRS members, hobbyshops and Associations by SCR Publications; newsagencies and bookstalls by Gordon & Gotch Australia Ltd.

CONTRIBUTIONS in the form of articles, photographs, hints, letters to the Editor, drawings or trade press releases are welcome for publication in this magazine. All items received will be acknowledged upon receipt. Please pack photographs and diagrams between stout cardboard before posting. Indicate whether photographs are to be returned and if trimming is forbidden.

SUBSCRIPTIONS: Rate (by mail); \$13.75 per year (6 issues); Overseas \$16.50 per year (surface mail). Subscriptions are limited to One year duration. All monies payable to SCR Publications at Matraville, NSW. Subscription starts with the first issue available one month after receipt of order. Receipt of subscription is not acknowledged unless requested and accompanied with a SSAE.

ADVERTISING: Details available from SCR Publications, PO Box 235, Matraville, NSW 2036. Phone (02) 661 4046 (evenings to 9pm only).

ADVERTISING DEADLINES: For all copy is as follows:-

December 1983	12.10.83
February 1984	9.12.83

This publication accepts no responsibility for the accuracy or reliability of articles or advertising contained herein, statements made or opinions expressed in papers or discussions, not do we necessarily subscribe to the views expressed or implied by contributors. Neither is any guarantee implied or expressed as to the good conduct or practise of advertisers herein. This publication reserves at all times, the right to refuse acceptance to any matter considered unsatisfactory for publication.

The Australian MODEL RAILWAY Magazine is published by SCR Publications, PO Box 235, Matraville, NSW 2036. Please address all correspondence to the Editor.

SOUTHERN CROSS MODEL RAILWAY ASSOCIATION

Secretary: Trevor Moore. **Membership Enquiries:** P.O. Box 317, EPPING, NSW 2121.

The Annual Membership Fee for SCMRA is \$14.00 from March to February and the Joining Fee is \$12.00. Applications must be received by the first of the odd month to meet our mailing list deadlines. For applications received between the 2nd September and the 2nd January the Annual Fee is \$7.00 plus the \$12.00 Joining Fee.

Membership entitles you to participate in the activities of the Association, to receive AMRM and our regular newsheet Booster. Standards, Recommended Practices and Information

DIVISIONAL REPRESENTATIVES:

New South Wales:

George Giraldi,
322 Elizabeth Drive,
Mt.Pritchard. 2170
Ph. (02) 602 3117

Queensland:

Max Chaseling,
10 Merlin Terrace,
Kenmore, 4069.
Ph. (07) 378 4462

Victoria:

Paul Hemsworth,
114 Melrose Street,
North Melbourne, 3051
Ph. (03) 329 0195

Sheets covering model railway practice are included in the joining kit together with a vinyl ring binder and are also issued at regular intervals.

For further details write to the Secretary or contact the divisional representative.

Meetings are usually organised on the second Saturday of each month in New South Wales, Victoria and Queensland. For further details and location please contact the divisional representative.

MEETINGS

New South Wales:

September 10 — Meeting and running session at West Ryde.

October 8 — Meeting and talk on electronics at Narrabeen.

November 12 — Annual family picnic at Parramatta Park.

December 10 — Meeting and railway movies at Epping.

Queensland:

September 10 — Meeting at The Gap.

October 8 — Model Contest at Everton Park.

November 12 — Layout working bee at Bald Hills.

TRADE PRACTICES ACT 1974

The above act is now in force and contains strict regulations on advertising.

It is not possible for this company to ensure that advertisements which are published in this magazine comply with the Act and the responsibility must therefore be on the person, company or advertising agency submitting the advertisement for publication.

In case of doubt, consult your lawyers.

SCR Publications.

Australian Model Railway Magazine

COMMENT

At the recent Castle Hill model railway exhibition a new method of presentation was tried, and most successfully. The Sydney based 'Menangle' layout was offered as a medium on which a group of visiting Victorian modellers operated their equipment.

The models represented N.S.W.R., VicRail, S.A.R. and Australian National and Sydney's modellers were able to see first hand, the work of these modellers who have been giving the Melbourne exhibition patrons a real treat for their money.

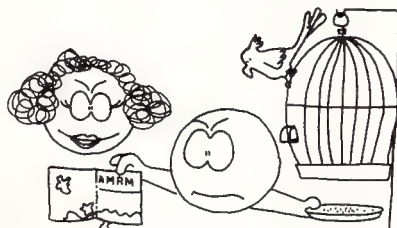
Castle Hill was a success, not only as an exhibition, but also because it gave the modellers of one state the chance of meeting and talking with their colleagues from another. At long last the rift had been sealed. Let's hope that it has a snowballing effect, and that interstate modellers will be the norm at most of our exhibitions from now on.

There is however a problem. If we are to commence the visitor style of layout operation then we must come up with a workable set of operating standards or guidelines. We in Australia have a choice of using at least one of four model railway standards. Unfortunately none of them, as a whole, are usable on the Australian scene. Problems like loading gauge and axle lengths are just two of the problems that Australian modellers have to live with.

The Australian modelling scene has sufficient following now to develop its own guidelines. So how about it? In this issue Phil Curnow presents a regime of what he considers should be presented. But what of the rest of you?

I believe that it is time Australian HO modellers stood up for themselves and demanded either standards or guidelines for their side of the hobby. We have a number of associations that can either separately or together gather the relevant details and publish them. One thought however, only modellers involved in the Australian scene should be involved in the compilation of these guidelines. The days when Australian modellers are dictated to by the American, European and British modelling scene must come to an end. They simply do not understand our problems.

Bob Gallagher.



"Well, I had to line it with something!"

CONTENTS

PAGE TWELVE

STONE CREEK AND DISTRICT — A Classroom Project

Bob Gallagher 12

Martin Arnold 13

34 NEW ELECTRONIC PROJECTS FOR MODEL RAILROADERS

— some corrections

Ian Weickhardt 15

I SAY AGAIN

Max Chaseling 16

MY INTRODUCTION TO RAILWAY MODELLING

Lyn Head 17

ANOTHER END

Bob Gallagher 20

WAGON PROFILE:

N.S.W.R. LLV, GLV/GLX, TLV/TLX and CLX Louvre Vans — Addendum

Bob Gallagher 21

PROTOTYPE PLAN:

N.S.W. S.R.A. 'CR' Class Car

Tim Arnot and Adrian Compton 22

BLUE LAKE MODEL RAILWAY EXHIBITION

24

SPRINGING SHINOHARA POINTWORK

Garry Squire 25

WAGON PROFILE: VICTORIAN RAILWAYS 'T' VANS

Phil Jeffery 26

ADDING KADEES TO A ROUNDHOUSE CLIMAX

Rowan Cole 28

THE PRAIRIE ROCKET — Modification

Paul Garrett 29

MODELLING PROJECT: RU24539

Phil Curnow 30

AMRM NEWS

31

SCENIC ROUTE

Phil Harrigan 32

WHICH WAY NOW

Phil Curnow 34

RING FIELD MOTORS FOR O GAUGE

Chalmers Watt 39

MAILBAG

41

REVIEWS

43

PREVIEW

46

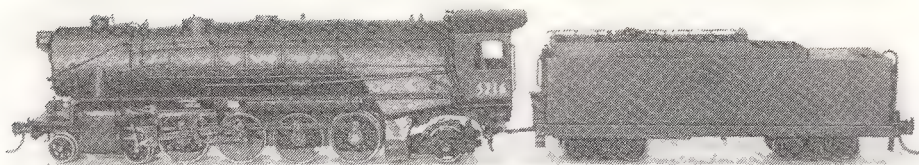


ON THE COVER

R761, at Heathcote Junction heads an enthusiasts' special celebrating ten years of standard gauge in Victoria (1972). The steam hauled special, on the broad gauge, ran parallel with the Spirit of Progress between Seymour and Spencer Street in Melbourne. Photograph by Howard Armstrong.

Peter Eisenhut painted this 'T' van to represent those which carried the VIMA logo. It captures T402 as it was in 1965 when it had become the last to carry the blue sides and white lettering scheme which had been shared by the four vans in use by VIMA. Note that the standard russet red scheme is applied to the ends, roof and underframe, as was the practice when advertising was carried on U or T vans. Peter Eisenhut photo.

VR 'T' vans are covered in detail in this issue.



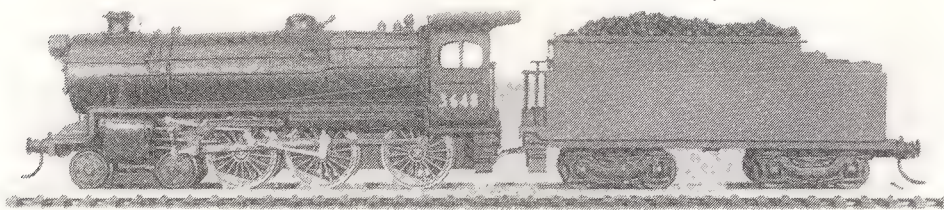
1



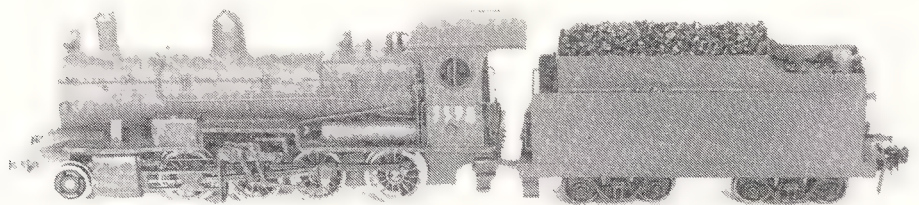
2



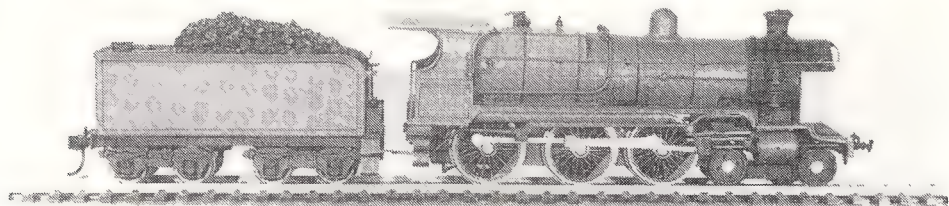
3



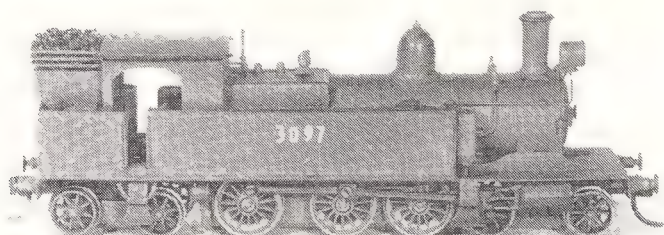
4



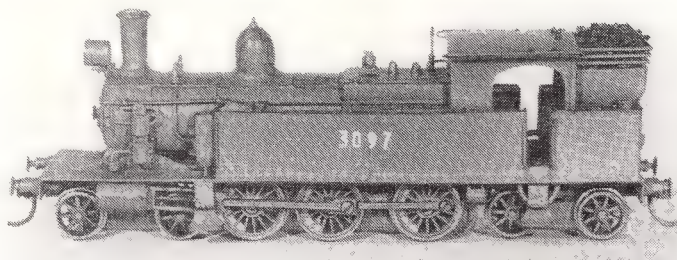
5



6



7



8

This issue **PAGE TWELVE** features some of the models built by Laurie Evans. Basically Laurie is a loner, but the quality of his models is very high. So high in fact that he has won a number of competitions against some very qualified competitors. Laurie models in HO scale and is building a large NSW based layout.

Notes and photographs by Bob Gallagher.

1. 5714 was the first loco Laurie built, back in 1968, at the time when George Berg imported his first NSW brass loco from Japan. The model started out as a 2-8-2 Northern Pacific Mikado. The drivers were turned down to the correct diameter, while the remainder was scratchbuilt.

2. Laurie's Streamlined C38 was built in the late 1960s. The model is completely scratchbuilt. The only commercial components are the Pittman motor, gears, tender side frames and the drivers, the latter of which were severely modified to obtain the Box-Pox appearance.

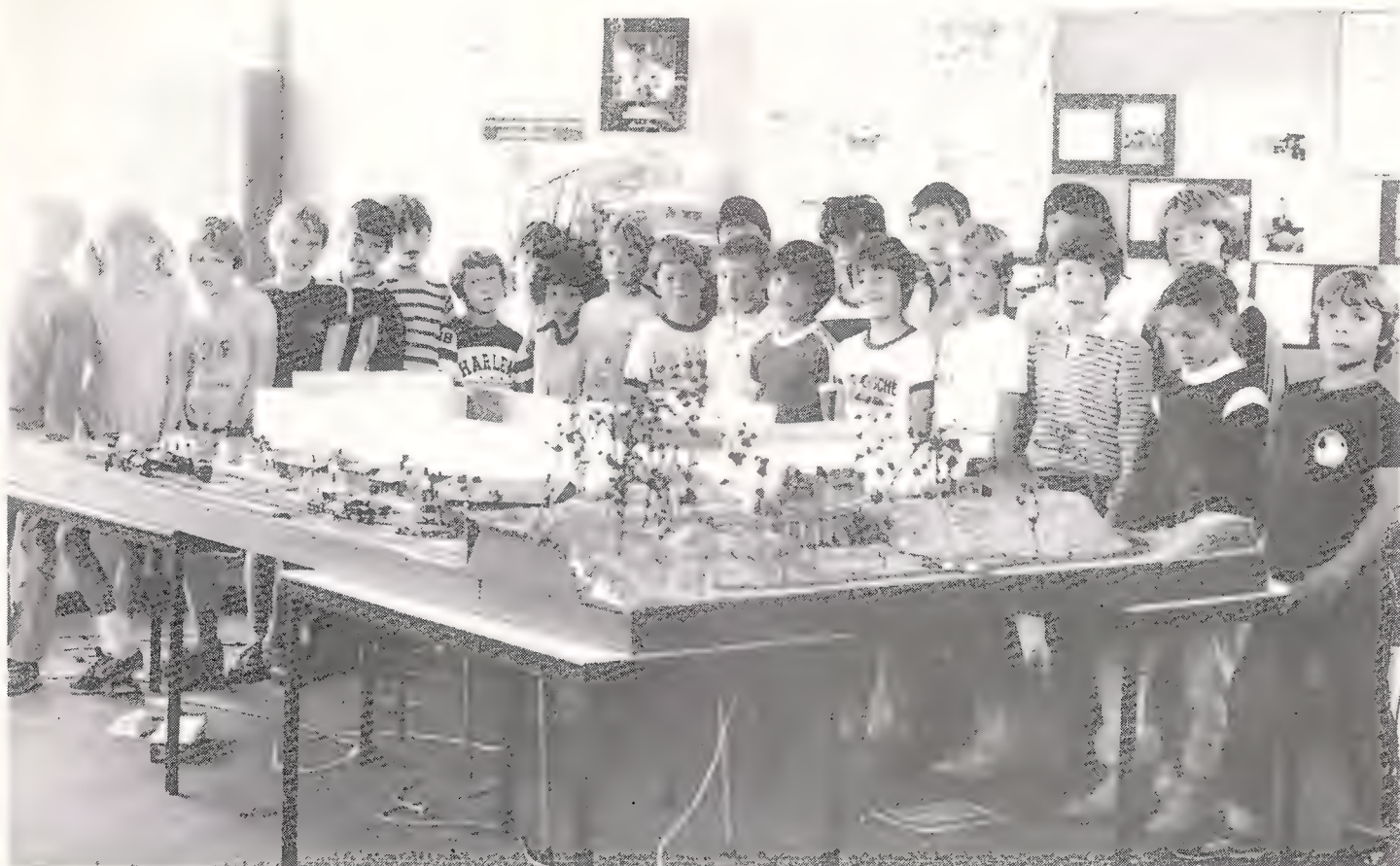
3 & 4. The C36 class was an EAMES kit which was built up following instructions, and detailed. The mechanism consists of Romford gears and wheels.

5. 'Katie', 5590 was the basis of an article in the May/June 1978 issue of AMRM. This model won the Best Exhibit award at the 1977 Canberra 'Malkara' Model Railway Exhibition, beating all including the 'Abbotsbury Southern' and 'Menangle' layouts in the overall competition.

6. NN1315 was modelled off the NN class that hauled the Prince of Wales' Royal Train in 1927. The model is again scratchbuilt and was detailed with FSM tender bogies, funnel and dome. The driving wheels are Romford. The model is painted Royal Blue with black smokebox while the Prince of Wales' standard is painted on the smoke deflectors. As with all steam locos, Laurie leaves the coal in the tender loose, making it a nightmare for unaware photographers.

7 & 8. A thirty class in thirty days is the description for 3097. Laurie considers this his thirty day wonder but the model does not show any sign of haste. An MW005 motor drives the Romford wheels via Romford gears. The model is completely scratchbuilt from brass section. Detail items were handbuilt as per the style use to build the 'Katie'. The model is painted black and lined in red. A layer of gray mist weathering was used to finish off the model.

More of Laurie Evans' model work will be featured in a future issue of Australian MODEL RAILWAY Magazine.



Stony Creek and District Layout — with some of the proud modellers.

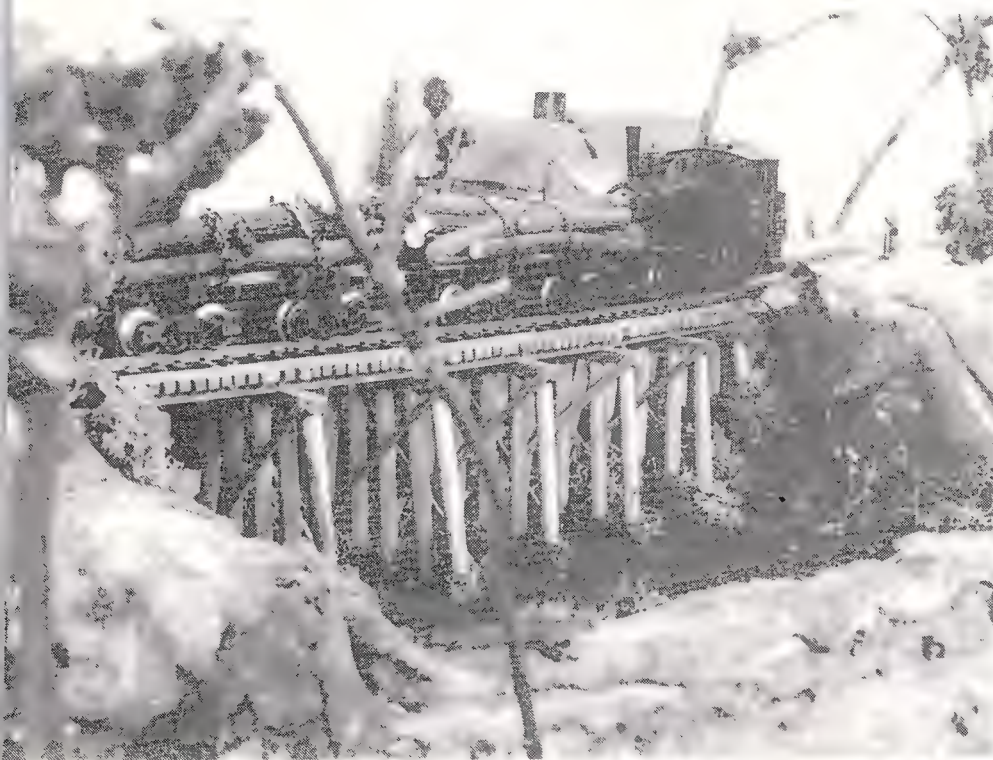
STONY CREEK AND DISTRICT — A CLASSROOM PROJECT

This HO scale layout was built by a group of about thirty grade 5 children (average age ten years) at Doncaster Primary School, a State Government primary school in the Eastern suburbs of Melbourne.

The project took eight months to complete.

By Martin Arnold

There were a number of aims, which included:
— to demonstrate the rewards of patience, care and planning;



A load of logs bound for the timber mill. The bridge was constructed from a Campbell kit.



The forest/logging area. The main line is on the left, the branch line serving the mill is on the right. The mill is in the foreground.

- an exercise in group co-operation;
- an outlet for some particularly creative and intelligent children;
- acquisition of constructional skills and experience;
- understanding concepts of scale;
- appreciation of characteristics of aspects of our Victorian environment, as demanded by the school Social Studies course.

Overall Plans

The original plan was to develop a layout set in Victoria around the 1920s, modelling four discrete areas:

1. a country town;
2. a dairy area, similar to the Gippsland area in Victoria;
3. a sheep/wheat area, as found in North and Western Victoria;
4. a forest/logging area, as found in many mountainous areas of Victoria.

None of the children had had more than the most rudimentary experience in modelling and their teacher could not be considered an expert! For most, playing trains meant opening the box and running the train around the oval of track until house dust, little brother or boredom put an end to the novelty. Our aim was to capture the main characteristics of each area, and the value of each child's contribution was considered far more important than achieving the highest standards of modelling.

The project commenced with each child constructing a building. Children were assigned to a particular area and, after discussion, a list of appropriate buildings was drawn up. Each child then had to find a picture of an appropriate structure to model, using the resources of the library; then a scale drawing was prepared. This process alone took several weeks, many concepts of drawing, plans and scale having to be taught.

Construction then commenced, using balsa wood sheets. Working one or two sessions a week, completion of a simple building took two to three months, with many moments of triumph, crisis, failure, tantrum and a few cut fingers.

The baseboard was then constructed; it was built almost entirely from scrap materials found under the school and consisted of chipboard pieces on a frame approximately 3 x 2 metres, with a centre operating aperture.

Track and Electrics

The track used was all Roco flexible track and all points were Peco, with four having electric point motors.

There was one large operating circuit (main line), a branch line which climbs up into the mountain to service the timber industry, a siding at one of the country depots and a loop and four sidings serving the main station.

All wiring was installed by the children and consisted of:

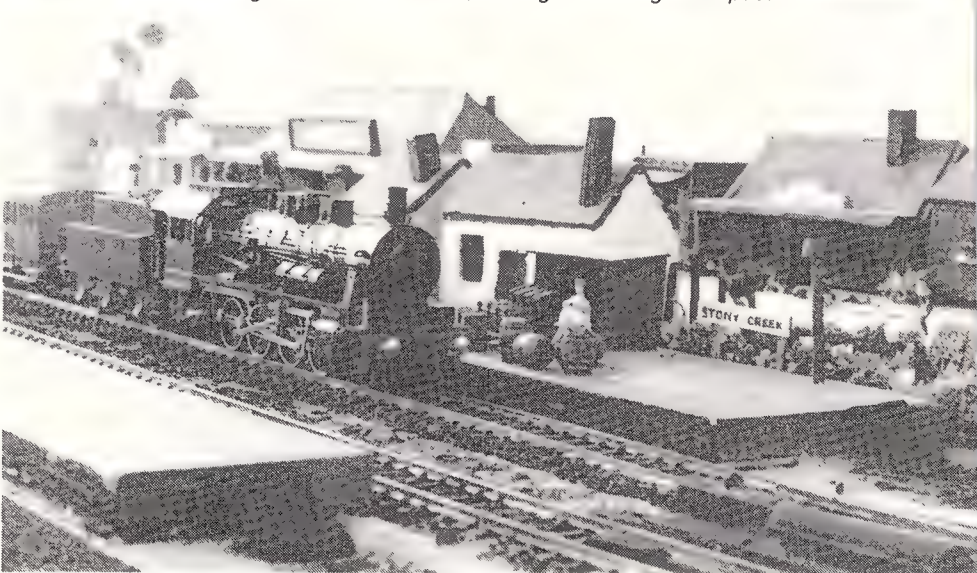
- lighting to about ten houses;
- an electric uncoupler;
- three solenoid operated semaphore signals, with lights;
- four electric points;
- two transistorised (Tempest) controllers, with changeover switches, allowing control of sections of track by either controller;
- an attempt at automatic signalling using reed switches;
- a home-made capacitor discharge system for operating points and signals.

Rollingstock

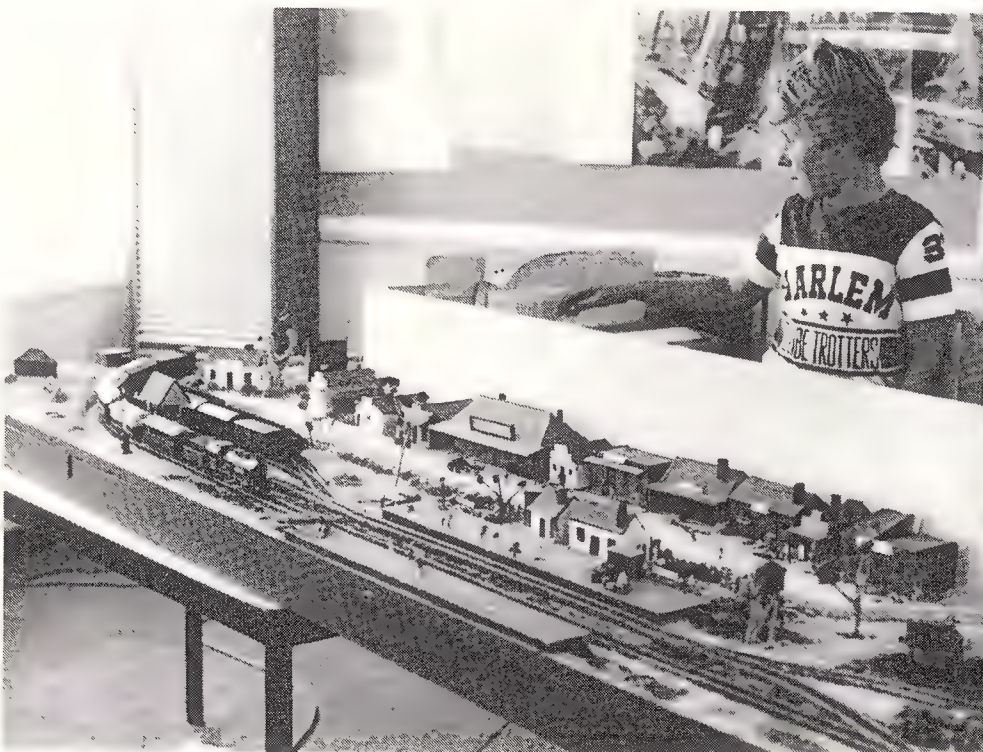
The two locomotives used were both Fleischmann steam locos, a class 700 and a G.81, and most rollingstock was either Roco or Fleischmann. Although not Australian, the appearance was not inconsistent with the desired atmosphere; 'old time' coaches from both manufacturers, originally Germanic



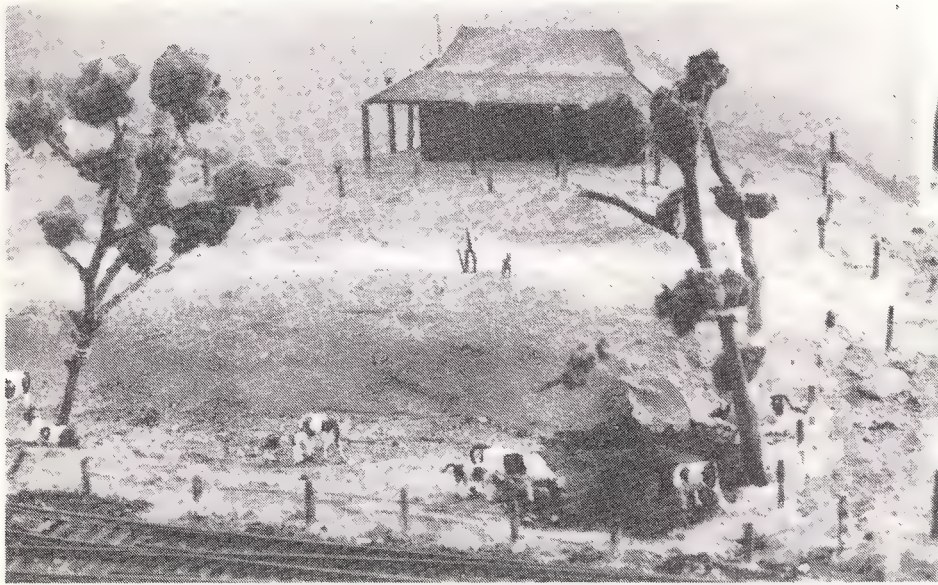
Like all good Australian towns, the largest building is the pub!



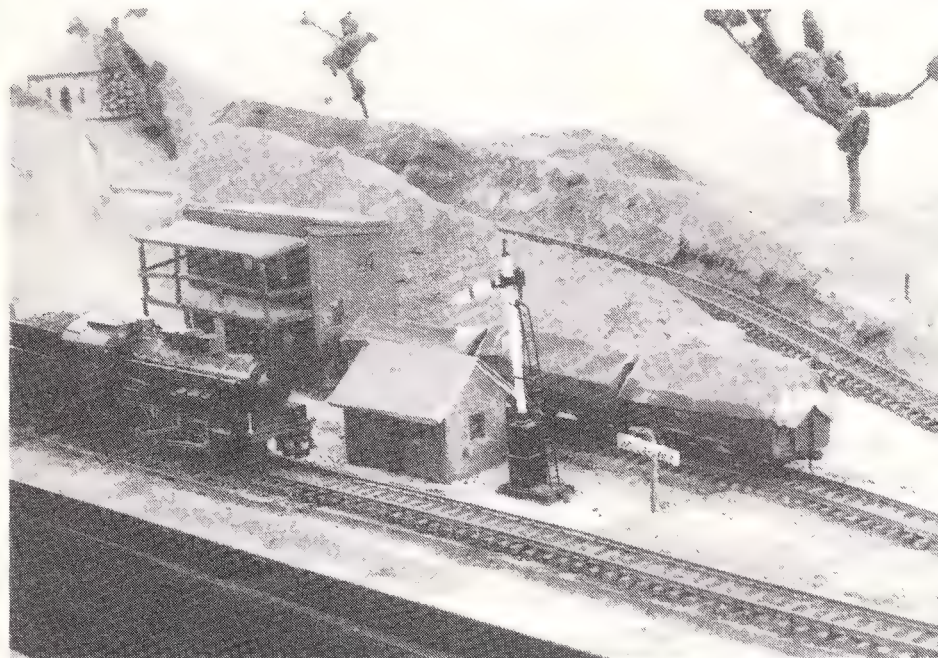
Details of Stoney Creek station; the platform and buildings are all made from balsa wood and painted with ordinary classroom paint.



A general view of the town and Stoney Creek station.



A peaceful rural scene; the children greatly enjoyed creating scenes like these.



Woodvale station. The 'GY' wagons were made from kits. The branch line to the timber mill climbs through a steep cutting in the background.

green, were sprayed a more appropriate red/brown colour.

Two of the children did construct 'GY' kits; however, although they looked quite good, they did not run well.

Scenery

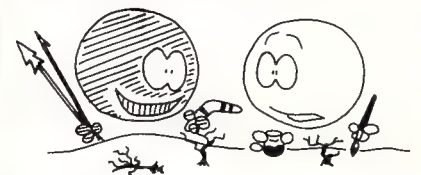
A combination of scrap timber, polystyrene foam, 'Modrok' and plaster was used to build up the desired landforms and most surfaces were finished using a dry plaster/powder paint mix and a water spray.

Many hours were spent on final details; individual gardens were created with painstaking and loving care; many plastic animals and people were carefully hand-painted; signs were erected and other details artistically and thoughtfully added. We ran out of time towards the end of the school year; this accounts for the somewhat sparse forest.

Operation

A timetable was drawn up enabling all class members to receive training in operation of the layout and it was exhibited to other grades and to parents. There was obvious pride amongst the whole grade in their achievement, and many appreciative comments from parents.

Within ten days of completion our masterpiece was dismantled, as the school year had ended; a book of photographs reminds us of our great and satisfying achievement. ■



"Can you wait until I finish the trees before you take over land rights?"



"Wherever do you get these cartoon ideas from, Dr. Stein?"

'34 NEW ELECTRONIC PROJECTS FOR MODEL RAILROADERS'

— some corrections

Some time ago AMRM reviewed Peter Thorne's new book. I believed then, and still do, that it is a very useful book for modellers who enjoy dabbling in electronics, provided they already have a fair electronics ability.

In using the book over the past few months, though, I have come across a disappointingly high number of errors. For the benefit of other users and potential users, I have listed the known problems.

Chapter 2.

(a) It is not obvious at first reading that the author describes THREE throttle circuits in pages 12 to 18. The descriptions are not sufficiently distinguished in the text. Read it very carefully and you'll be right.

(b) The pulse generator PCB (printed circuit board) is in error. It cannot work as an essential track is completely missing. To fix this, run a track across the board from Pin 2 of the 555 IC to its Pin 6.

(c) The PCB drawing given, if photographed as a 'master' for PCBs, will yield potential short circuits. Firstly, some of the white areas are not wide enough and the tracks end up touching each other; secondly, the 'black border' around the drawing will short all the copper areas together.

A bit of white 'Liquid Paper' applied to the drawing will fix both problems.

(d) The power transistor, ('Darlington' amplifier) is now not listed by Tandy. Their 276-2042 has been withdrawn. Use one of the other listed types.

Chapter 6.

(a) The 'simple signal' concept on p.55 seems to me to be less desirable than having no signal at all. Its only use would possibly be on the layout of a youngster who "wanted to see the lights change" but not care about the whys and wherefores.

(b) Fig.6.4 (p.56) has its output incorrectly

by Ian Weickhardt

labelled. Instead of reading "To voltage regular input ..." it should read:-

"output. Connect to 'logic' input (e.g. 'B') on relevant Signal Board".

(c) There should be schematic circuits for every board, not just the logic diagram and PCB layout. Even the addition of pin numbers and IC identities would help. Other electronics publications do this.

General comment on PCB drawings.

- several of these have inadequate 'white' between 'black' areas.
- several have a black margin which should be whited out before being photographed as PCB masters.
- as a rule of thumb, carefully check PCB drawings to see that they correctly represent the circuit. ■

I SAY AGAIN

A Queensland Railway steam loco conversion by Max Chaseling

At a recent hobby exhibition, I was pushing my metaphorical barrow and ended up doing the work — some of it anyhow.

For many years I have strongly advocated that Australians who run British model trains are either lazy or ill-informed. Whilst this statement may flood the Editor's desk with mail, those with an open mind may care to hear me out.

It must be a fact that realistic modelling of anything is, at least, difficult if the real thing cannot be seen. Further, if our friends and neighbours can also relate our efforts to the '12 inches to the foot' model, then the pride which arises is incentive to do better.

In our adopted one-eyed State, often called 'Joh's country', the universal cry is — "but where can you buy Queensland trains?"

People will not accept that almost any Triang-Hornby train is Queensland Railways painted the wrong colour.

For many years I have advocated that OO scale 16.5mm gauge is closer to 3'6" than 4'8½" and, because of the similarity in rollingstock, particularly for the steam era, British models convert very easily to QR.

The above argument became warm and I was challenged with — "Well, what about a locomotive?"

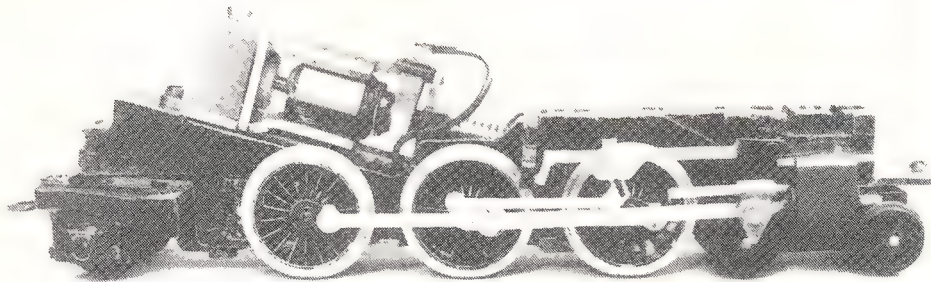
The early Triang Bo-Bo diesel goes well if repainted in QR colours — just ask Jack Buchanan; and the Hiawatha is a good base for a B or BB18¼.

Suddenly I was presented with a very second hand Hiawatha and was told "show me".

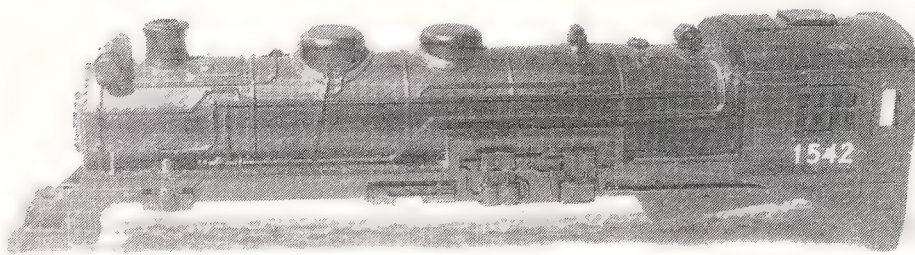
Of course, one first needs a plan and, whilst the temptation to scale-up the 3.5mm plan of the BB18¼ in AMRM No.46 September/October 1970 was strong, I found it expedient to re-draw the basic details from a ¼ scale railways diagram.

The first obvious problem with the Hiawatha is that the driving wheels are too large. This was solved by using Romford 20mm diameter wheels and axles with conversion bushes for Triang-Hornby mainframes. These wheels can be drilled suitably to accommodate the Triang coupling rods as is but I chose to remove the rod-end pins (carefully with pliers) and used 12 BA screws on the outermain wheels. The holes weren't tapped through so that the screws jammed on the taper left by a taper tap. Several trial fits are the best approach to tapping the correct depth. The centre wheel-pins were carefully removed and transferred to the Romford wheels, suitably drilled.

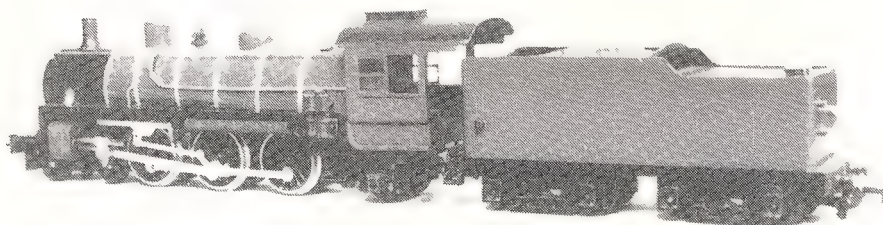
Continued on page 28.



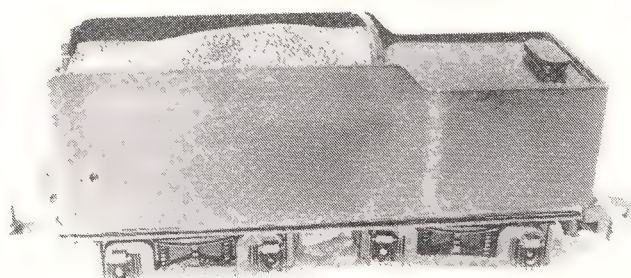
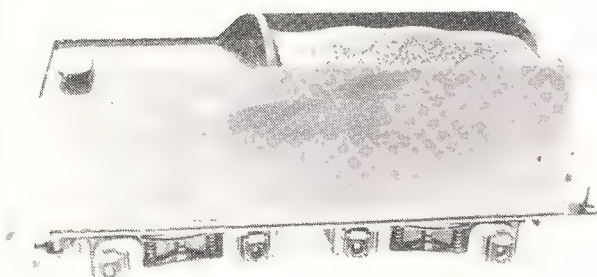
The mechanism before (above) and after (below).



The body — before conversion.



Both sides of the tender.



MY INTRODUCTION TO RAILWAY MODELLING

by Lyn Head

Just twelve months ago the Mackay and District Model Railway Club decided upon family membership. This the Committee hoped would encourage more participation by wives, mothers, sisters and girlfriends.

What Would I Do As A Member Of A Model Railway Club?

These clubs are usually full of grown men who gather once or twice a month to "play trains" so I thought. How wrong my pre-conceived idea was. What I hadn't realised was that a good railway modeller must be a civil engineer, town planner, landscape artist, electronics whizz and more.

The landscape artist is what I would like to be. As my husband Doug and I have two young children we feel that a layout is out of the question for a year or two. However, as the children are both interested in trains, a model railway would make the ideal family hobby.

How could I become involved without a layout to scenic? A diorama proved ideal. Not only did it give me the opportunity to participate in a local hobby display, it has been a valuable aid in attempting new techniques. Once our layout becomes a reality I won't risk ruination by applying untried methods.

What is a diorama? To my mind it is a small display that tells a modelling story.

Structures.

As a child I have vivid memories of staring out of the carriage window watching the countryside glide by. Holiday time was always exciting as once a year I got to ride on a train. As a city girl the tiny farmhouses with their "outhouses" always fascinated me. Whatever did people do when it rained?

I guess with memories like that there was only one scene to which I could do justice.

The farmhouse is a Campbells kit amended to Australian design. The shingle roof was replaced with corrugated iron and a brick base was added to complement the brick chimney.

"Outhouse mischief" is a Woodland Scenics kit; however, I chose to use lichen trees instead of those that came with the kit as I felt lichen gave the scene more Australian flavour.

The windmill is part of A.H.M.'S Dusty Gulch Water Station kit — whoever heard of a farmhouse getting water from any other source.

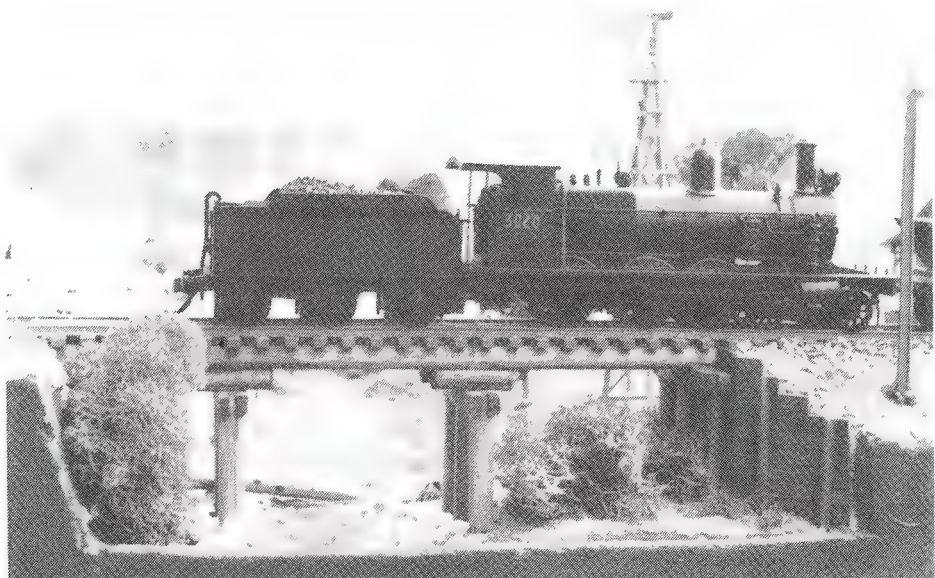
The timber bridge is scratchbuilt from meat skewers bought from the butcher for a mere two cents each. Even the Government couldn't complain about that cost.



A 750mm x 600mm diorama proved a valuable aid to gaining first-hand experience in modelling techniques.



The farmhouse is a modified Campbells kit. Note the brick base and corrugated iron roofing which helps create an Australian design.



The timber bridge is scratchbuilt from meat skewers bought from the butcher — total cost 12 cents. The abutment is to true Queensland Railways design using balsa and scrap rail.

Basic Construction.

As our layout is to be designed for easy transportation I have experimented with styrofoam (Coolite) as the base for terrain formation and rock-face. It is very easy to use and, best of all, cleaning up is a breeze because the waste vacuums up in minutes.

Good scenery should start from the ground up. Therefore, I started shaping the terrain

from the bottom. Using the first cut piece as a guide, I cut the next piece a little smaller, continuing until the required shape and height was achieved. A jig-saw did the cutting effortlessly. After stacking the pieces I glued them together with Aquadhere. As the pieces were laminated I found some areas that had to be either cut away or built up to give a realistic appearance.

The next step was to round and form the

final shape. I used both a wood rasp and a rotary rasp fitted to the electric drill. Eroded areas and other natural physical features were carved with a sharp hobby knife.

The cliff face began by cutting away the styrofoam with a sharp knife. The rock form is picked away with a fork and finger nails.

When the form work was completed, a thin layer of plaster was brushed over the entire surface to add texture.

With the form work completed, I fitted the structures into place before painting the base an earthy brown. This was done to eliminate any white showing through should any ground cover come off at any time. The cliff face was painted with the same earthy brown paint. However, to add realism I highlighted the rock outcrops with four other colours ranging from ochre to a mid-grey. The dry brush technique was used.

Stream.

How does one go about modelling a stream? Firstly I had to form the stream base. A hard plaster formed over the depression in the base-work made a good base. I had to ensure the plaster sealed around the seams because casting resin, when used to create water, will find the smallest pin-hole to escape through. As the stream was to give the appearance of flowing off the diorama, a dam was needed to stop the resin from flowing onto the floor. Another reason for ensuring that the plaster made a water-tight seal was that any imperfections in this area would allow the resin to penetrate and attack the styrofoam base.

The stream bed was detailed using rocks, sand, fallen logs and trees. Before detailing I painted the stream bed with the same earthy brown as used previously. The areas of shallows were painted one or two shades lighter.

Before adding resin, everything in the stream bed was secured with a mixture of

Aquadhere and water. Thin the glue to a 1 mixture and add a few drops of detergent to act as a wetting agent. As real dirt, rocks and sand were used, I washed them to remove loose dust and to prevent un-natural looking bubbles from forming on the surface of the resin. Once the casting resin was poured, it would be too late to change the scene so I had to be sure that it pleased me.

Casting resin can be irritating to the nose so good ventilation is essential. Resin attacks some plastics so paper cups make ideal containers whilst paddlepop sticks are good for stirring.

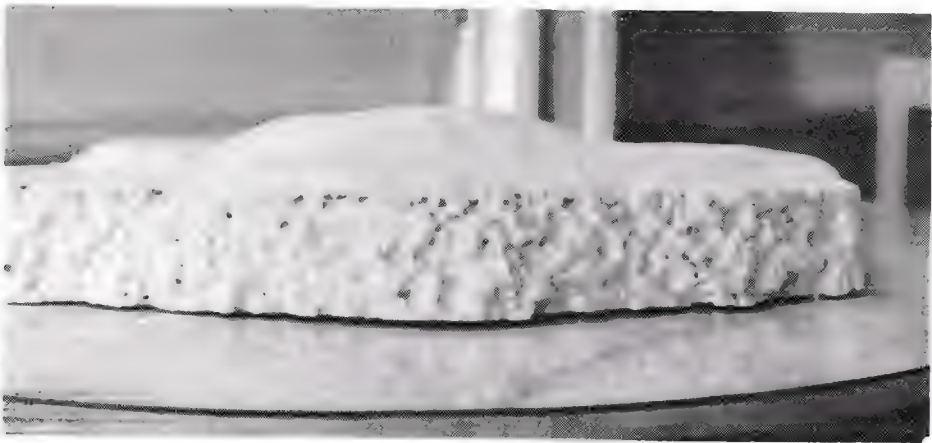
I used Daystar CR64 Clear Polyester Casting Resin, blue dye and hardener. Once the mixture has been mixed and poured it has to be set aside for several hours before it is hard. Embedding resin certainly makes the most realistic water. I have seen. A second layer could be poured if desired. However, I felt the first layer gave the effect I was looking for.

Ground Cover and Trees.

For ground cover I used the ever popular coloured sawdust. It was difficult to find commercially prepared products that were the colours I intended using. Most were far too "golf course green" for my liking so I decided to try my hand at preparing my own. This I achieved by using "Rit" fabric dyes. Their Olive and Kelly greens are just right. Now that I had a supply of sawdust I had to decide the best method of application. Although the basic form work had been painted earthy brown, I felt that soil would need to be used to give the most realistic appearance. When using soil from my garden, I learned quickly that it would need to be sieved to achieve the required texture. By using a coffee strainer the texture was fine enough to become earth and the coarser grade obtained by using a flour sieve was excellent for use as loose rock.



Good scenery should start from the ground up. The styrofoam was cut and stacked before shaping with a wood rasp or a rotary rasp fitted to an electric drill.



The rock form of the cliff face was picked away with a fork and fingernails before the thin coating of plaster was applied.



With the base work complete it was treated to a coat of earthy brown paint to eliminate any white showing through, should any ground cover come off at any time.

As untreated soil has a tendency to turn to mud as soon as it comes into contact with the glue mixture, I found it necessary to dry the soil by placing it in the oven for 30 minutes. This procedure also ensures that the heat will kill any "out of size" insects that have decided the diorama is a good place to live.

I was now ready to apply my ground cover. I painted the base with a 1 mixture of Aquadhere and water to which a drop or two of liquid detergent had been added. Working on a small area at a time, I painted the base with the glue mix then sprinkled earth on very sparingly. Next came the two shades of green sawdust. I tried to get a bare area at the top of the rise and a grassy area around both the house and the stream. In achieving the desired effect, it was necessary to apply the darker shade first, followed by a dusting of the lighter shade. I was very pleased with the overall effect. The track was to be ballasted next. Again I used natural material.

By sieving crusher dust through the coffee strainer, the required size was gained. The ballast was applied with a teaspoon and spread with a small chock of wood. A 1:1 Aquadhere and water solution was then mixed (not forgetting the detergent) and applied to the ballast with an eyedropper. The milky fluid spread right through the ballast. Before working on the ballast, I felt it necessary to weather the track. Shiny track would have been out of keeping with the overall setting.

The embankment was treated to some glue mix before applying the earth. The coarser grade of earth was used at the base of the embankment to represent small rocks that had broken away.

The dirt roadway was a little difficult to model. After spreading the earth quite thickly, a 1:1 glue mix was applied. To simulate wheel tracks I ran a scale model car up and down the newly formed foundation. After leaving to dry for 24 hours the surface was sanded with a fine grade sandpaper. The overall effect was one of a badly graded country road. Some of the wheel ruts were evident, so to give a more dusty effect I rubbed earth on with my finger. To ensure all ground cover was set, I sprayed the whole scene liberally with Testors' Dullcote.

Now with the bulk of the work done, it was time to fit the structures. At last the diorama was beginning to take shape.

All the trees are hand-made using natural twigs and lichen. I used a combination of "feature" trees and "one stem" ones. A dead tree was used here and there to add variety. To simulate weeds and stunted undergrowth I used Woodland Scenics' foliage and small pieces of lichen.

A model is not realistic until the smallest details have been added. Matches made good guideposts. The level crossing signs are old railway track and balsa, the telephone poles and wires are old railway track and fishing line, whilst the old railway fence is again old railway track with strands of cotton for rusty wire. Some cows were added to the foreground. However, there was something lacking. HUMAN INTEREST. The elderly gentleman sitting in his favourite chair on the verandah unaware of the boyish prank in progress out the back added the final touch.

With the diorama now complete, I stood back to admire my many hours of work. Was it really worth the effort — had I achieved my objective? This was my first attempt, of which I am quite pleased. Perhaps other Model Rail-

way Clubs might like to try family membership, thus giving other wives, mothers, sisters or girlfriends the opportunity to contribute their skills to such a fascinating hobby.

I believe that anyone, by studying the proto-

type and paying attention to small details, can create a realistic diorama. As I **NOW** see it, railway modelling is not only running trains as I first thought, but is a creation of the real thing in miniature. ■



The stream is cast from casting resin. The stream bed was detailed before pouring the resin. The cliff face was highlighted with colours ranging from ochre to mid-grey to add realism. The dry-brush technique worked well.



Dirt from the garden, together with home-dyed sawdust, was used as ground cover, whilst the trees were hand made from twigs and lichen.



More photographs next page.

Sieved crushed dust was used to ballast the weathered track. Course dirt on the base of the embankment represents small rocks that have broken away. Scrap pieces of track and sewing cotton make an inexpensive rusty wire railway fence.



Left: The badly graded country road proved difficult to model. The guide posts are cut down match sticks, whilst the level crossing sign is scrap track and balsa.

Below The elderly gentleman dozing in the warm sunshine unaware of the boyish prank in progress out the back was the human interest that added that final touch. A diorama is, after all, a small display which should tell a modelling story.



ANOTHER END

The article on Page 31 of the June 1983 issue (No.120) featured wagons of the New South Wales railway system that had been fitted with an end panel different to that originally fitted. No sooner had the issue hit the streets than the photo of A.N.R. 'AOXX 93' came to hand from Phil Curnow. Apparently the South Australian Railways and Australian National Railways also repair wagons regardless of original design. The photo of 'OX 5', taken in Enfield (NSW) yard by Bob Gallagher illustrates the correct end for the ex S.A.R. 'O' wagon.

It would seem a simple task to fabricate a 'SGX' ribbed end and fit it to a Broad Gauge Bodies 'O' wagon kit.

While looking at ends, Phil Curnow, possibly known as the photographer of the unexpected, presented the photo on the right which illustrates the lower, or underside end of an ex S.A.R. 'O' wagon. For the super detailer the photo illustrates the full underfloor detail of an 'O' or 'OB'.

OB 397 was photographed at Verdum, 28/12/73. It is believed that the accident was caused by a hot box. A 'tongue in cheek' warning to modellers who do not maintain the bearings of their bogie rolling stock — super detail the underfloor.

Bob Gallagher.

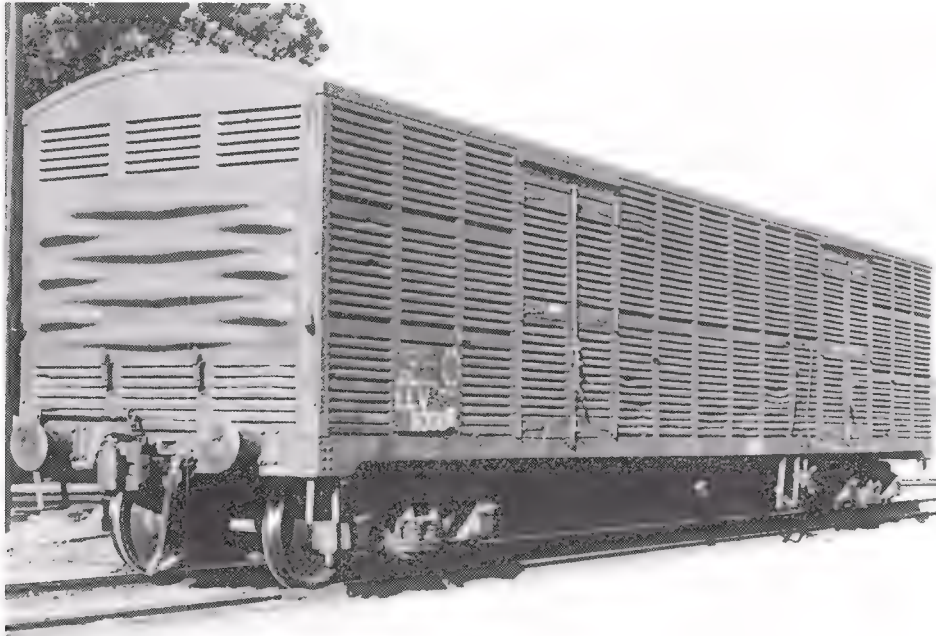


N.S.W.R. LLV, GLV/GLX, TLV/TLX and CLX Louvre Vans —

Addendum

The N.S.W.R. louvre vans featured in a 'Wagon Profile' in the December 1982 issue

(No.117) and although the coverage was extensive a few details were omitted. Howard Armstrong has supplied the additional photographs.



LLV 11300 — *photographed at Griffith, November 1980.*

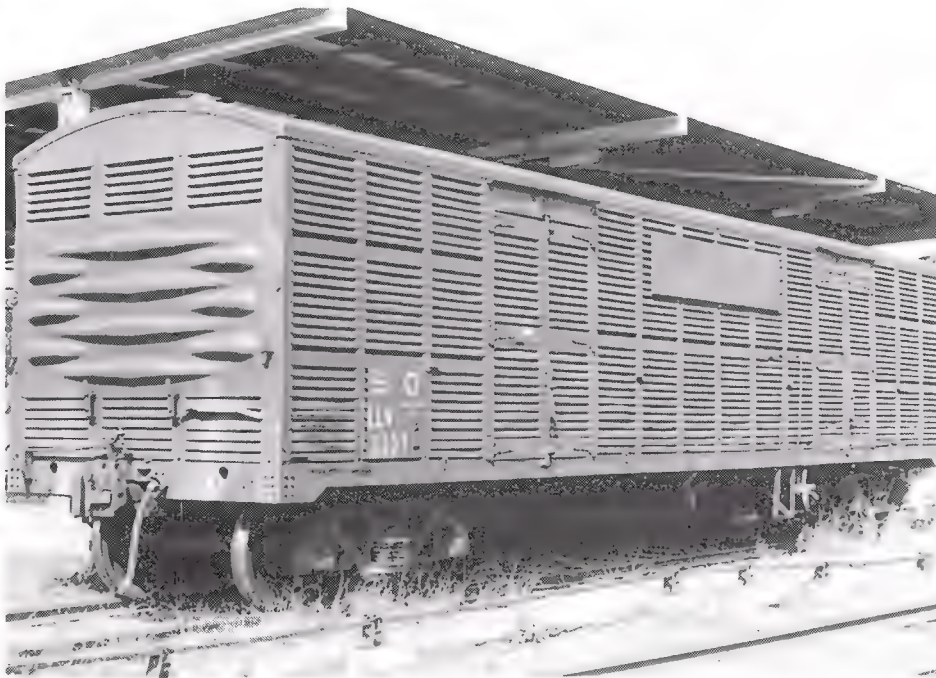
Fitted with buffers — as designed, and presumably delivered — the van still retained this old style of coupling, and original bogies until the early eighties.

LLV 11107 — *photographed at Dapto, April 1977.*

Fitted with original Andrews bogies, the van in apparently good condition is fitted with a signboard, high up in the centre of the van side. Actual use of the van with signboard is unknown, the early series LLV being too light to carry tinplate and none were in the consist of the Sydney-Perth through running of 1970 when signboards were fitted to many vans. Maybe a reader can supply AMRM with relevant details and hopefully a photograph to illustrate the lettering on the signboard.

TLV 29462 — *photographed at Cringilla, July 1961.*

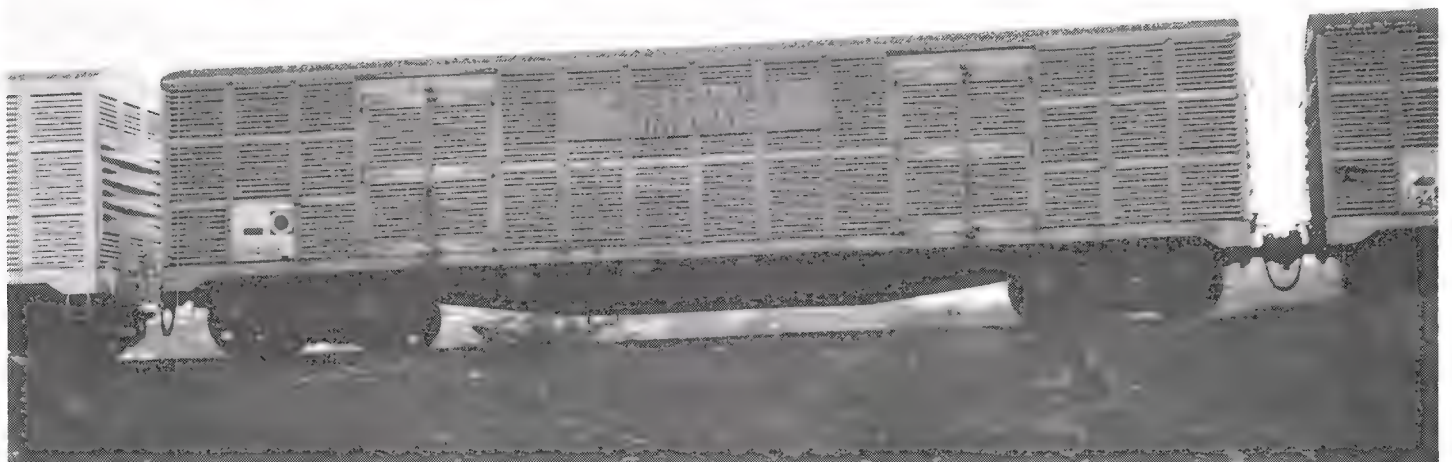
TLV 29462 and TLV 29497 are part of the 'Tinplate Express' which ran between Port Kembla and Dynon (Vic.) following the completion of the standard gauge to Melbourne. The TLVs were painted silver, originally bright but fading/weathering quickly, and a number of the vans were fitted with a signboard. TLV 29462's signboard was yellow with black 'AUSTRALIAN TINPLATE' lettering. Lettering style was not always the same. The code board was white, and other lettering on the van black. Note that the sign on the TLV is longer than the signboard on LLV 11107.

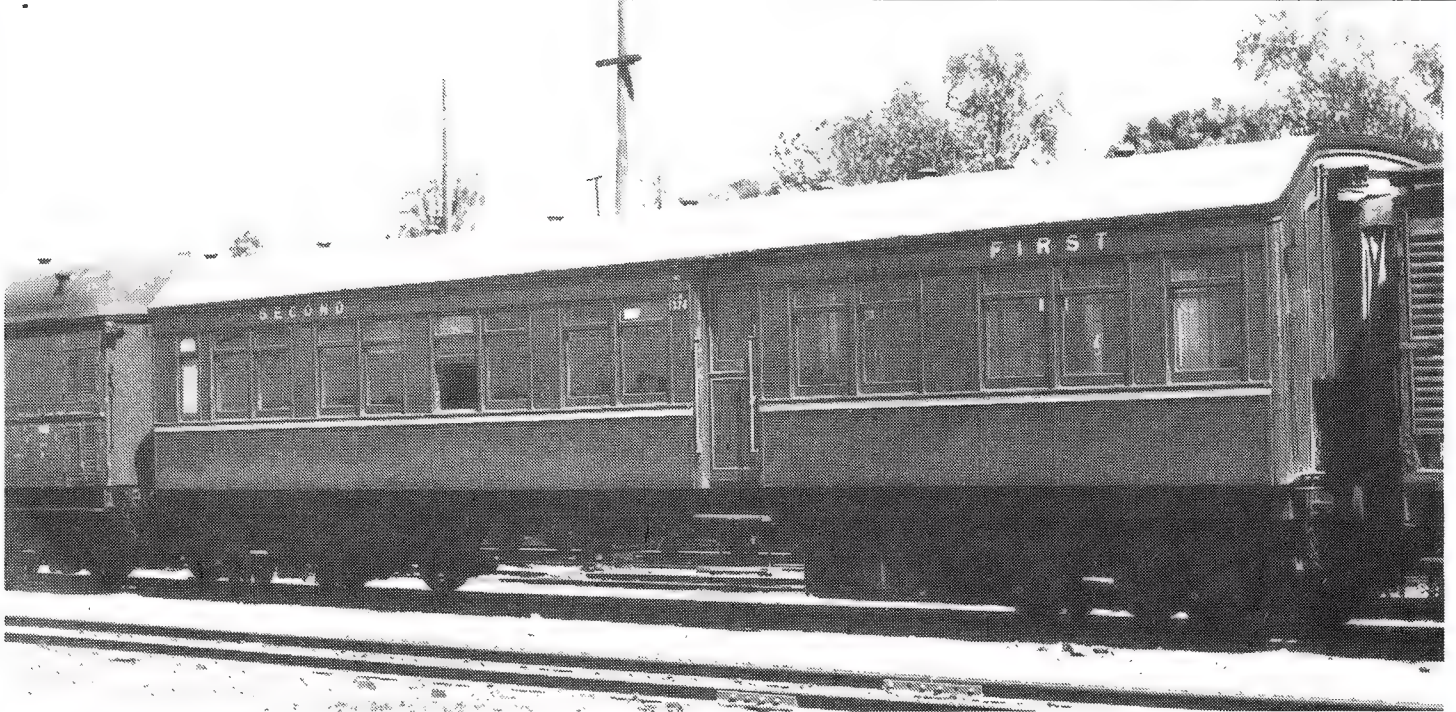


TLV and TLX vans were not the only N.S.W.R. vehicles used for tinplate. A number of 'K' wagons were used for tinplate traffic between Port Kembla and Containers Pty Ltd at Hurstville. The traffic ceased in the early seventies. The open wagons were coded 'TPK' and were painted silver, like the TLV/TLX vans. The wagons were observed with and without tarpaulins, when carrying the tinplate.

Research on most goods wagons has largely been neglected by railway historians in the past. To modellers this information is now needed. AMRM can assist by allowing individual modellers to 'swap' information. If anyone has any further photographic information on these or any other vehicles presented in AMRM, that varies with that shown, please send in the photo and relevant caption information.

Bob Gallagher



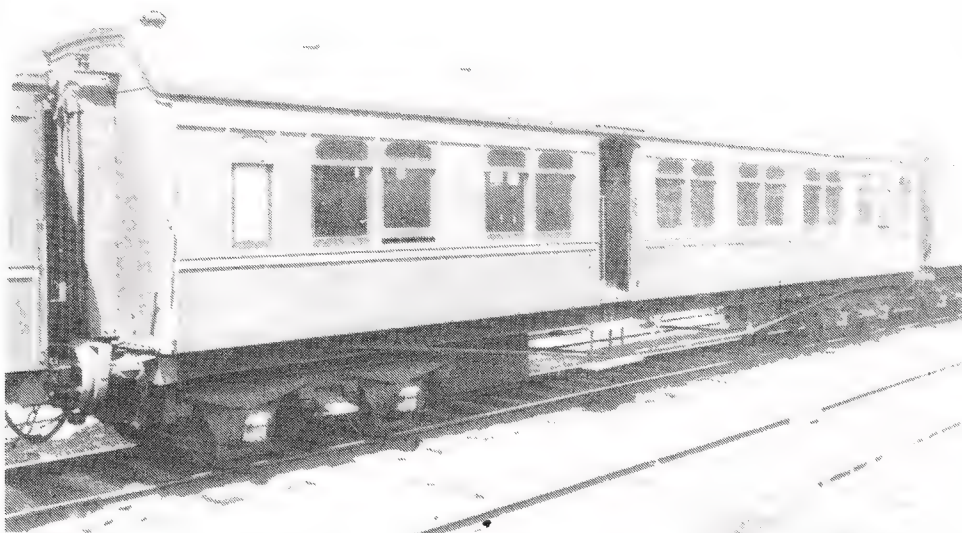


PROTOTYPE PLAN

NSW SRA 'CR' Class Cars

Tim Arnott details the history of these composite corridor tourist cars.

Plan by Adrian Compton.



CR 1372, as built, except for the plain sheeting on the sides and the vents. Howard Armstrong took the photo at Scarborough in 1979.



CR 1183, crown lights removed, and clad in plain masonite. Howard Armstrong photograph.

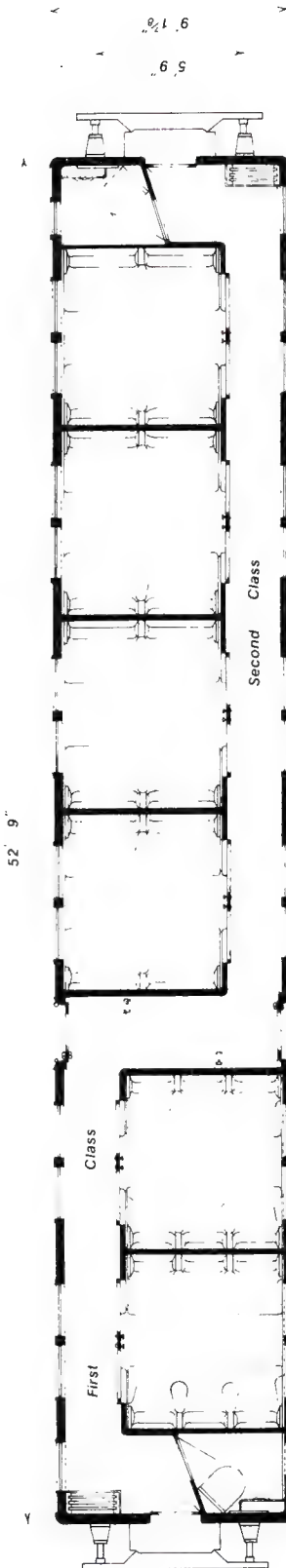
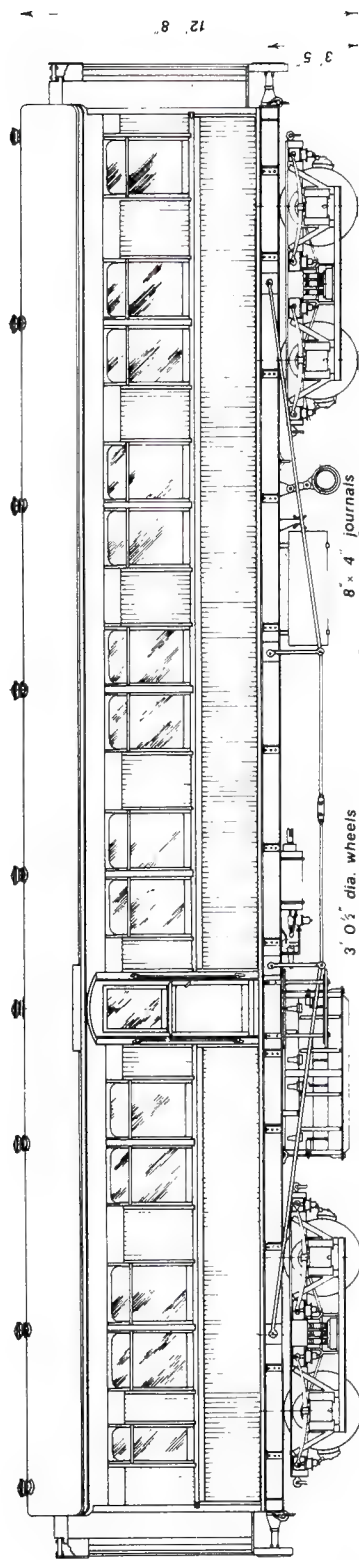
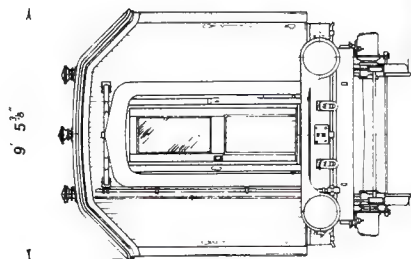
Following on from the successful 1st and 2nd class "R" cars, conversions were made from CX cars to CR — a design seating 12 1st class and 32 second class passengers. These cars are notable for the very much off centre doorways, with two 1st class compartments on one side and four 2nd class (economy) compartments on the other, a feature common to NSW composite sitting cars.

The original 18 cars were put to work on a wide variety of duties on all lines in the state, providing the through accommodation on mail trains to such places as Bombala, Lake Cargelligo, Brewarrina, Grenfell, Mudgee, Burren, Walgett, Pokataroo and Barraba. In each case, the cars would have started in a mail train from Sydney, and finished as probably the only passenger car on a mixed goods. They were also used on many branch line mixed trains and connections to main line expresses. The advent of the ACS composite sleepers and two car diesel trains gradually cut down on the CR's rostered duties, except perhaps on the non-through mixed trains, and as "spare" cars to build up overcrowded services.

With the advent of the PTC and the wholesale withdrawal of most country branch trains, the remaining cars were used to help replace the aged end platform cars on the Illawarra line, and the survivors remain mostly in this area.

There have been relatively few changes to the cars since all were rebuilt from CX "dog boxes" in 1938/39. The original matchboard sides have long since been replaced, although some car ends remain in this material. From about 1965, unrepairable crown lights were replaced either by an unbecoming slab of wood inserted in lieu, or a partial exterior above-window rebuilt to the double letter-board style, common to most 22.1m twelve wheelers today.

Original car numbers were 57, 1180, 1182, 1183, 1184, 1372, 1374 thru 1380, 1386, 1413, 1415, 1416, 1417. Cars condemned to August 1977 are 1182 (1.960); 1180 (1.75); 1374 (9.75); 1416 (6.76). Further conversions have been 1386 to HC in 9.72, also 1376 and 1413 to HCR in 9.73. Briefly, the HC is a composite car with guard's and luggage space seating 16 Economy and 6 First Class passengers, being originally used in the country areas including Canberra local



Legend :-

Light.

Vent.

Randwick Fitting
in ceiling.

Scale :-

Inches 12 0 5 10 15 20 Feet

N.S.W.G.R.

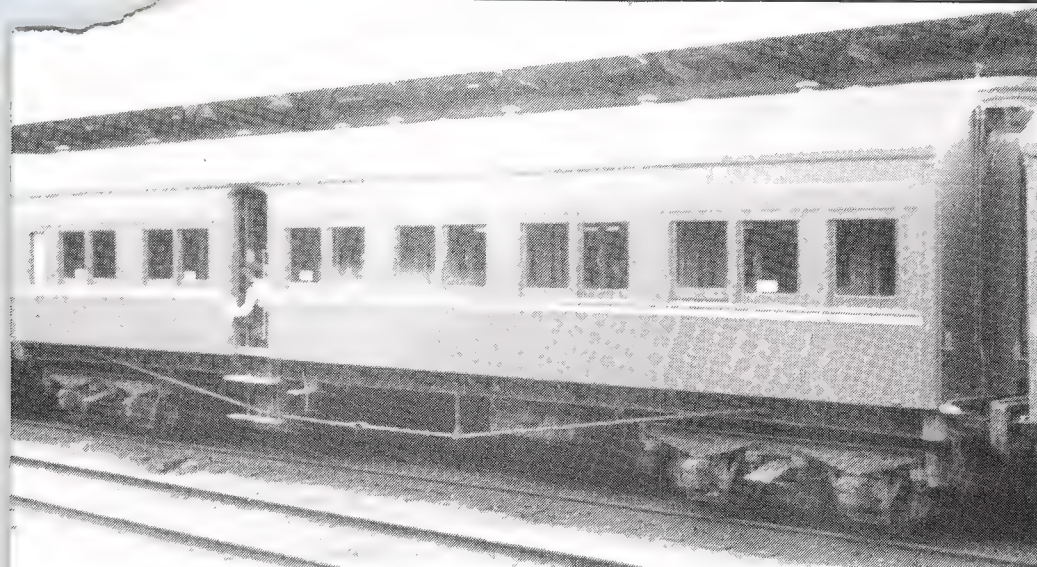
**COMPOSITE
CORRIDOR CAR
CODE - C.R.**

Capacity :- 12 First Class
32 Second Class

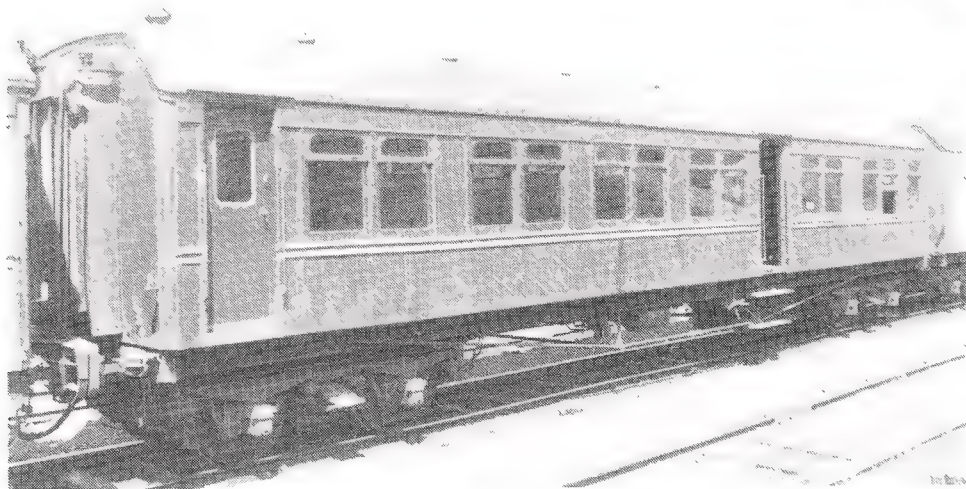
Tare :- 27 tns. 7 cwt. 0 qrs.

Date :- June '79

Drawn :- Adrian Compton



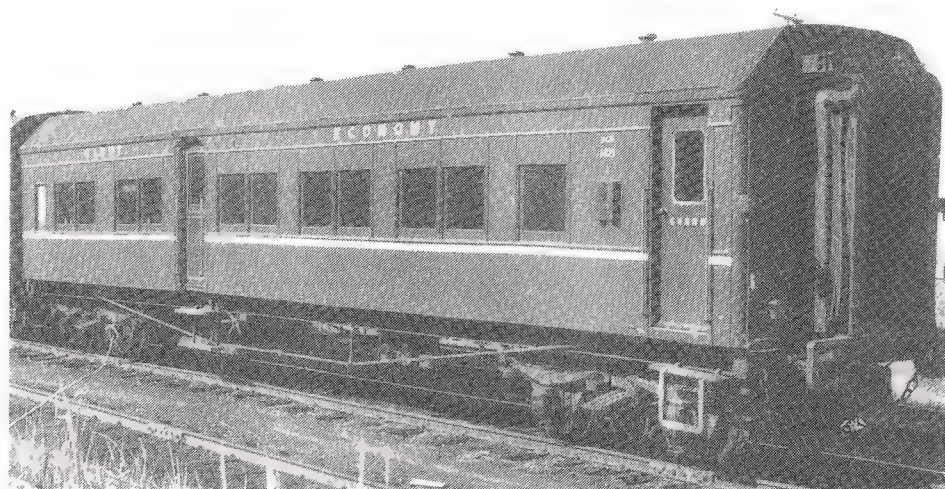
Cleaning time at Central station, this CR coach shows the vehicle without crown lights (above the main window) and with plain sides. Bob Gallagher photo.



This photo, by Howard Armstrong, illustrates CR 1371, still fitted with crown lights but with an additional doorway cut-in the side in place of the toilet to allow fast loading for suburban working. Note the crude fitment of the new door, where the normal arch above the door has not been continued in the addition of the doors.



HCR 1413 converted from CR 1413. Note the addition of two doors in one side and only one additional door in the other side. Photos by Bob Gallagher and Bill Clow.



services and later in commuter trains. The HCR's were converted to composite guards vehicles by the simple expedient of taking over the outer end economy compartment and fitting it out with our external door and lookouts, thus seating 12 first and 24 economy passengers. They were used initially on Richmond commuter trains with 107 set, and currently as independent cars, mostly on the Illawarra South Coast line.

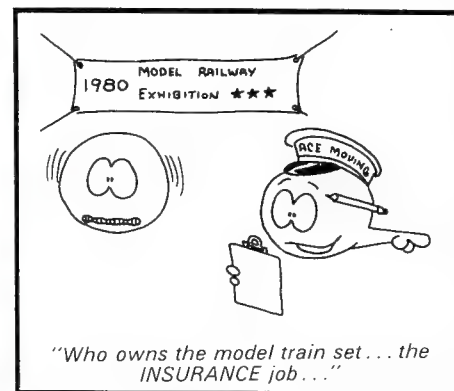
Three cars have had extra doors for passengers added since 1973, these being the two HCR's and CR.1379; the compartment doors of these cars also being removed, allegedly to help decrease loading time—what it certainly did was increase draughts and generally render the cars most unsuitable for night use.

Only two cars retain crown lights, being 1379 as mentioned above and 1372, which car in the closest to original condition left, only having lost the matchboard sides. Cars 1377, 1380 and 1417 as well as HCR, 1376, HCR. 1413 and HC. 1386 sport wooden slab replacement while cars 57, 1183, 1184, 1375, 1378 and 1415 have received the double letterboard renovation.

Acknowledgements and thanks are due to Mr. Forsythe of the NSW PTC archives for the provision of historical data.

EDITORS NOTE: The text of this article was prepared in 1981.

For further details on the 'R' class cars, read 'R class Cars of the NSW' by Tim Arnott in the November/December 1977 issue of the Australian MODEL RAILWAY Magazine.



Blue Lake Model Railway Exhibition

Over the Anzac weekend a successful exhibition was staged in Mount Gambier by the Blue Lake Model Railway Club. The main purpose of the exhibition was to present the hobby to the public and to show how it can be a very entertaining pastime. Nothing on this scale has been presented before in South Australia.

Stands at the exhibition ranged from HO and N scale layouts to trade stand, book stand, second hand stand and a scratchbuilding stand.

The BLMRC presented two layouts, one belonging to Austin Balnaves and built as a portable exhibition layout, and the other a collectors' item Hornby Dublo 3-rail layout belonging to member Jim Brooks. Other clubs exhibiting layouts were the Ballarat & District Model Railway Club, Corio Model Railway Club and the South Australian Railway Modellers Association Inc.

SPRINGING SHINOHARA POINTWORK

An Exercise in 'N' Scale

by Gary Squire

I run Peco track and points as, I venture to suggest, do a great number of flextrack devotees. In the main, I find this to be quite satisfactory, although the additional variety of N scale pointwork offered in other brands would be useful if compatible. And one of the brands providing some of the most interesting N scale variety is Shinohara.

It is not hard to overcome the rail height differences between Peco and Shinohara, with careful selection of rail joiners, but almost immediately after purchase one discovers a more serious problem with the Japanese brand.

I prefer to operate my points manually, for purely economic reasons; Peco's positive action afforded by a small elbow spring suits manual operation but Shinohara rely upon the installation of point motors for firm changeover. Without motors, neither sure running over the points, nor reliable electrical contact, are guaranteed.

The double crossover I had bought, therefore, had four floppy points built into it and, it would seem, required at least two, possibly four, motors. But before committing my limited funds I decided to explore the alternatives. The answer came in the form of installing into each point one of the Peco springs.

Now, if you visit your local hobby shop and ask for some Peco point springs you will be greeted either by howls of laughter or vague reminiscences about "the few we managed to get in about five years ago" and which, of course, are all gone or lost.

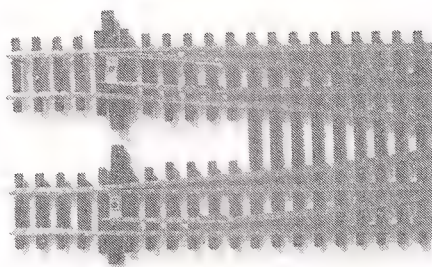
However, despair not! Fortunately Peco bring out at reasonable cost a point motor adaptor base (for mounting the Peco motor above the baseboard — cat. SL-71) which incorporates the same elbow spring as the point. Even more fortuitously, the spring is designed for easy removal.

By carefully prising open the spring retaining plates from four such adaptor bases, I removed the springs. I immediately lost one, catapulted to oblivion in a sea of shag pile carpet. The valuable lesson thus learnt was to tie a length of cotton to each spring throughout the entire process.

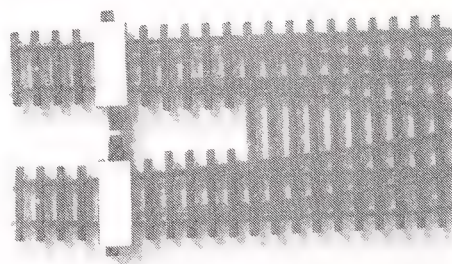
After cutting back the two extended sleepers either side of the point slip bar (to make manual operation easier and to look neater), I drilled $\frac{1}{8}$ " holes in the slip bar and one adjacent sleeper, checking, of course, for correct spacing. I found it most convenient to drill outside the outer rails to be clear of the metal contacts and tie bars, as shown in the drawings.

Next I made spring retaining plates from 10 thou. styrene as illustrated, ensuring I gave each elbow spring sufficient clearance to operate. Finally I superglued the plates to the undersides of the sleepers adjacent to the slip bar, after the springs had been located and tested. The small extent that these retaining plates raise the point sleepers off the baseboard is hardly worth mentioning, particularly after ballast has been laid.

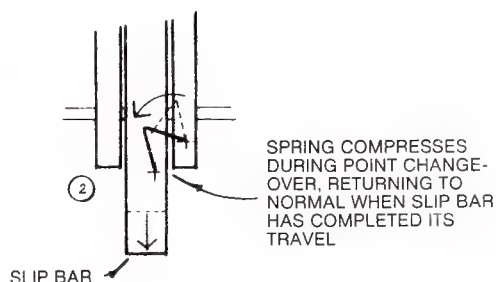
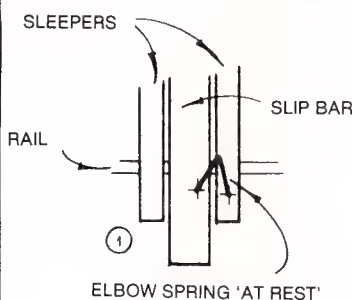
What I now have is the variety afforded by Shinohara, combined with the manual operating suitability of Peco. And with the recent appearance of two Shinohara double slips and a three-way point in N scale, I see this adaptation becoming most useful. ■



View from the top.



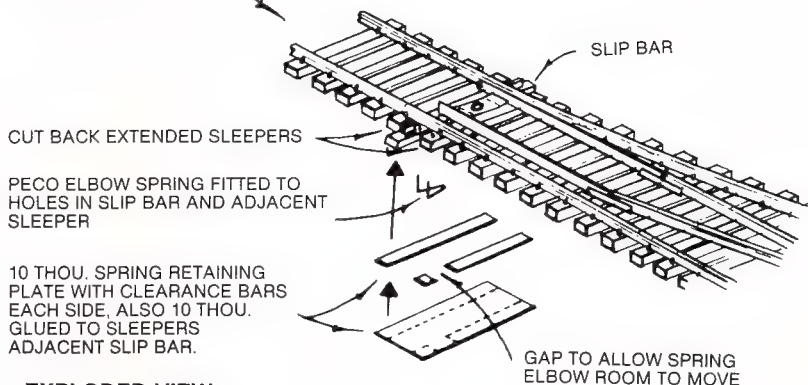
View from the underside.



SPRING — SHOWN IN OPERATION

VIEWED FROM BELOW — RETAINING PLATE REMOVED

SHINOHARA POINT



EXPLODED VIEW

MILITARY MODELLING

Modellers wishing to include an Australian military scene on their layout may wish to consider a number of items from the Roskopf HO scale vehicle range.

Suitable items include:

- No. 30 — Leopard 1A2 series battle tank.
- No. 107 — 105mm Howitzer.
- No. 118 — M113 armoured personnel carrier.
- No. 121 — Centurion battle tank.

Paul Rogers



"Bring the twins — they can play with Dick's toy train!"



WAGON PROFILE

VICTORIAN RAILWAYS 'T' VANS

By Phil Jeffery

In the September/October 1977 issue of AMRM, 'T' vans were covered in model and prototype articles. This article presents further information to enable you to operate your 'T' vans in a prototypical manner.

Construction Dates

The vans were constructed over a sixty year period, from 1894 through to 1954 as follows:

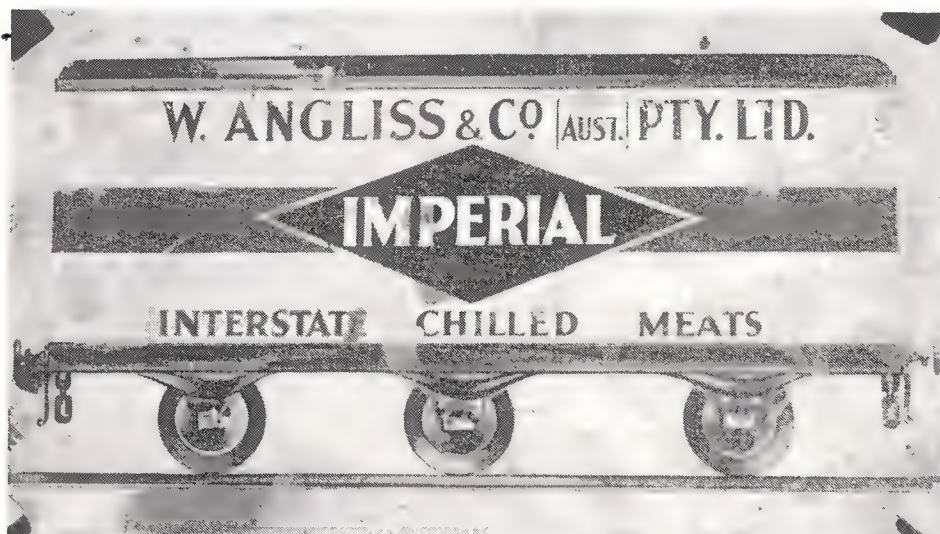
- 12½ ton wood sheathed vans
- 1894 1-34, 73-105
- 1895 35-72, 106-120
- 1897 121-130
- 1904 131-140
- 1905 141-162
- 1906 163-190
- 1909 191
- 15½ ton wood sheathed vans
- 1909 192-219
- 1910 220-221, 223-230
- 1911 222, 231-242
- 1912 243-262
- 1913 263-292
- 1915 293-323
- 1917 324
- 1918 325-342
- 1922 343-386
- 1923 387-409
- 1924 410-417
- 15½ ton metal sheathed vans
- 1954 420-469

Note that vans 410 and 419 were not constructed.

Meat Traffic

Transportation of meat was one of the pur-

poses for which these vans were constructed. In the early days of this century, circa 1915, this traffic was catered for in 'non-iced' 'T' vans marked 'TFM'. The 'FM' stood for frozen meat and the usage was mainly from the Newport Freezing Works and the Government Cool Store.



The most colourful of the 'T' van schemes identified so far belongs to Wm. Angliss & Co. They had cream sides with a broad red stripe. The word 'Imperial' is in a blue diamond and the firm's name is in black lettering. This signwriter's diagram is thought to date from the 1950s. A letter from Alan Bebee quoted an article from the VMRS 'Coupling' of June 1942 which gave the colour scheme and also stated that "the cars are in use for frozen meat service to Albury". Wm. Angliss still had cars in meat traffic in 1961. (Diagram Phil Dunn collection)

From the collection of John Buckland comes this photograph showing two of the Tancred vans being shunted at Albury by K160 in April 1953. The ends and roof were standard colours, whilst the lettering was dark blue on a white background. Note the lack of wagon number on the side of the van. (J. Buckland photo)

A later development was the fitting of either bars, or rails and hooks. A maximum weight of 12cwt was permitted to be hung from the roof of 'T' vans and carcasses were to be hung rather than placed on the floor. Veal and pork were subject to further regulation. Each carcass had to be clearly marked with the full address of both the sender and consignee. Pork could be hung, but the vealers, because of

their tendency to bleed, had to be placed on the floor.

The 12½ ton vans were fitted with 24 hooks, those still in use in 1959 being 17, 30, 33, 35, 38, 47, 48, 78, 82, 83, 91, 92, 98, 104, 109, 113, 118 and 119. By the early 1960s these vans were no longer in meat traffic use.

All of the other 'T' vans fitted with hooks were of the wood sheathed 15½ ton type. Fitting commenced in 1936 with T206 and T329,

which contained 152 hooks and were used by M. Dalley & Co. and the Department.

Vans 346, 347, 349, 353, 361, 367, 371 and 390 were fitted with bars and 115 hooks from 1937 through to 1959. At that time they were converted to have end ice bunkers and received an additional 20 hooks. William Angliss and Co. used these vans and had them specially painted to carry the company name.

In 1942 a further eight vans were fitted with temporary rails for Borthwick and Sons. They

were numbers 204, 205, 217, 220, 260, 286, 412 and 413. In 1961 these vans were to be fitted with standard bars and 135 hooks. However they were not converted and vans 331, 344, 355, 360, 368, 373 and 379 were suitably modified to replace them.

Tancred Brothers had six vans fitted with meat rails and no hooks in 1950. Numbers 404, 405, 406, 407, 408 and 415 were allocated and also carried advertising on their sides. The colours used were white sides with dark blue lettering. Ends, roof and underframe were painted standard wagon russet red. Tancred were taken over in the early 1960s and photographic evidence shows that by 1965 T405 had reverted to an overall russet red paint scheme.

The Victorian Inland Meat Authority logo was carried on vans 400, 401, 402 and 403, which were fitted internally with bars and 128 swivel hooks during 1951. VIMA's colour scheme was the reverse of the Tancred one, having white lettering on a dark blue van side.

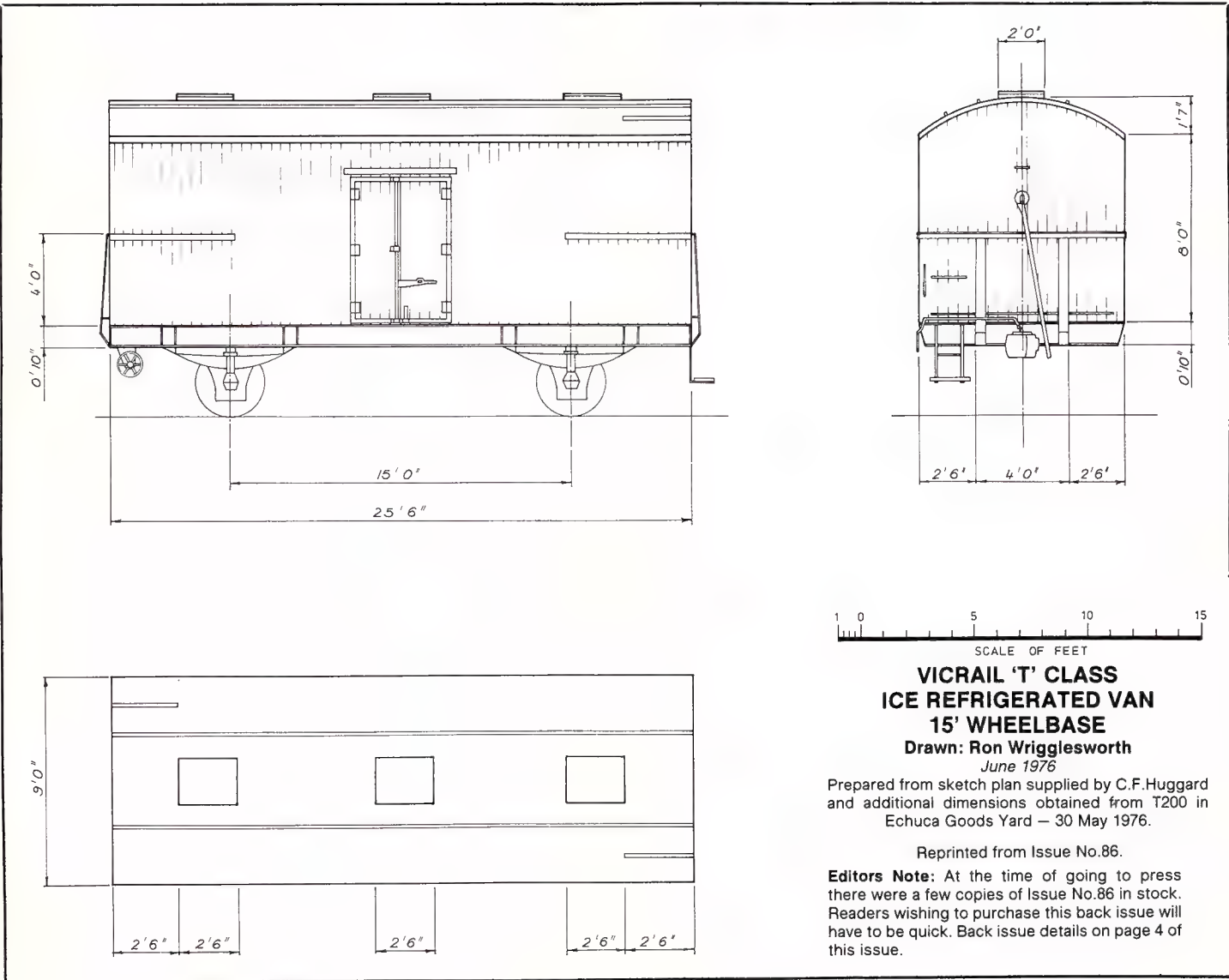
During 1956, T209 and T337 were equipped with temporary bars for use by Jackson's United Meat Co. Pty Ltd. These vans were planned to have these temporary fittings replaced by permanent bars and 135 hooks later in their life.

What do internal fittings of 'T' vans have to do with modellers? Operators amongst you will see that these vans introduce another level of complexity. When your meatworks request a van, not only do you have to send a 'T' van, but also one which has the correct fittings! For the builders, here is an excuse to build and paint up a couple of extra vans, so dig out that 1977 issue of AMRM and start building some more vans.

More photographs next page.



This Victorian Railways photograph shows how the inside of a 'T' van looked when fitted with hooks and rails. Super-detailers note that the rails fit on top of the side walls. (VR photo RS 401)



T349 was photographed by John Buckland at Albury in 1947. It clearly shows its colourful paint scheme. Less obvious is the lack of a centre ice hatch. Also note that there are no drain pipes on the end of the vans. This identifies it as an 'end bunker' type 'T' van. Another foreign vehicle in Albury yard is the South Australian 4-wheel refrigerator van, R9125.

The VIMA logo was carried on four 'T' vans in the 1950s, but by May 1965 when T402 was photographed at Ararat, it was the sole survivor. The sides were dark blue with white lettering. Ends, roof and underframe were standard russet red. (Phil Jeffery photo).

CLUB LISTING

In the December 1983 issue, a listing of Model Railway clubs will be printed. All clubs wishing to be included in the listing are invited to send relevant details to :-

Model Railway Club Listing
SCR Publications,
P.O. Box 235,
MATRAVILLE, 2036.

Details required include . . . Club name and address (if applicable), meeting days and times, Secretary's name and address, membership availability, and club specialty.

All details must be on hand by 1.10.83.

MAGAZINE BINDERS for AMRM

These binders are available from some hobby shops at a recommended retail price of \$6.00, or by mail order from Eastern Division SCMRA at \$5.50 plus postage. Postage and packing in NSW is \$2.50 for up to three binders and \$3.50 for up to nine binders. For readers in other parts of Australia postage and packing is \$4.00 for up to three binders and \$5.00 for up to nine binders. The binders will accept most other model railway magazines.

Please send cheques payable to Eastern Division SCMRA to P.O. Box 317, Epping, 2121, NSW. Please allow four weeks for delivery.

I SAY AGAIN

Continued from page 16.

A slight complication exists if the Triang worm-wheel is to be retained because its bore is larger than the $\frac{1}{8}$ " Jackson axle. I cut the flange from a conversion axle bush and soft soldered it to the centre of the drive axle. After a careful clean-up it was found that the gear was a light press on fit. It is probably obvious that these can only be assembled in place after the chassis has been modified and painted.

The trailing bogie was shortened, as was the leading bogie. The front of the mainframe was re-worked to suit the modified boiler.

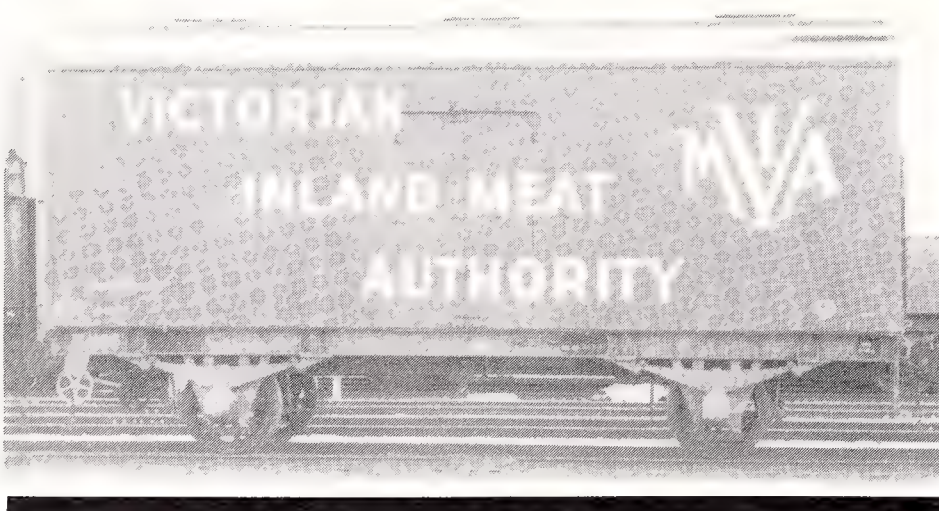
If the cab is carefully removed from the body, its roof can be re-used and also the backhead. I followed generally the construction pattern from the 1970 article for the boiler re-build and the problems encountered were solved in similar fashion.

The cylinder block and valve gear was fashioned from, I believe, a Triang Princess with the lower slide bars removed and crossheads re-worked.

When assembling the chassis, the insulated drivers go to the right hand side.

The tender was shortened with razor saw and Testor's glue to give a body length of 98mm, lowering the bogie bosses until the frames just cleared the underside of the tender frame.

A coat of paint completes the illusion. ■



ADDING KADEES TO A ROUNDHOUSE CLIMAX

(AND SO PROBABLY TO THEIR BOX CAB AND TRACK CLEANING DIESELS AS WELL)

By Rowan Cole

The actual operation is easy, but it is easier still if someone (me) tells you how they (I) did it. Here it is.

Needed are one packet of Kadee Number Seven couplers, and for Kadee No.208 washers (red in colour, 0.015" thick, $\frac{1}{4}$ " outside diameter, $\frac{1}{8}$ " inside diameter).

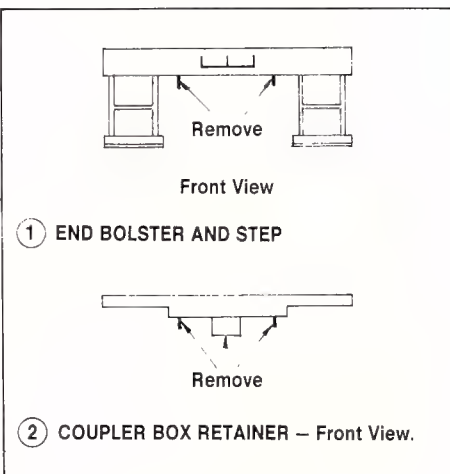
The procedure is:

- (1) Cut off the two rails of plastic from underneath the centre of the END BOLSTER AND STEP assembly (these form the X2F coupler box sides) to make the centre section flush (Fig.1).
- (2) Cut the two rails and pivot off the COUPLER BOX RETAINER to make its centre section flat (Fig.2).
- (3) Assemble a No.7 coupler as per Kadees' instructions.
- (4) Cut one of the screws supplied with the No.7s so there is about 5mm of thread.
- (5) Insert the screw through the coupler and place two washers over the screw.
- (6) Place the screw in the COUPLER BOX RETAINER hole and apply finger pressure to make it hold. Do not try to screw it home (you can't) but push it with pliers, one jaw on the screw head and the other on the top of the COUPLER BOX RETAINER.
- (7) Fit the END BOLSTER AND STEP assembly to the chassis.
- (8) Fit the COUPLER BOX RETAINER and coupler to the CHASSIS/END BOLSTER AND STEP (hold the END BOLSTER AND STEP with your finger and push the COUPLER BOX RETAINER, outside of the lugs, with the tip of a screw driver).

- (9) Make sure the coupler operates freely (make sure the screw has not been pushed in too hard) and align the coupler so that it faces directly ahead, otherwise the ability to couple or uncouple will be impaired.
- (10) To make the coupler stay aligned, glue it to the screw and/or the washers and COUPLER BOX RETAINER.
- (11) Test it to make sure it is correctly installed, then do the same for the other end.

It is apparent from this that anyone using Kadees should have a height gauge and a test track fitted to their layout, or just 3' of balsa with a length of flex track and an uncoupler fitted, to make sure that their stock will be compatible with others and will operate as they are meant to.

This has deliberately been an easy step-by-step conversion guide. ■



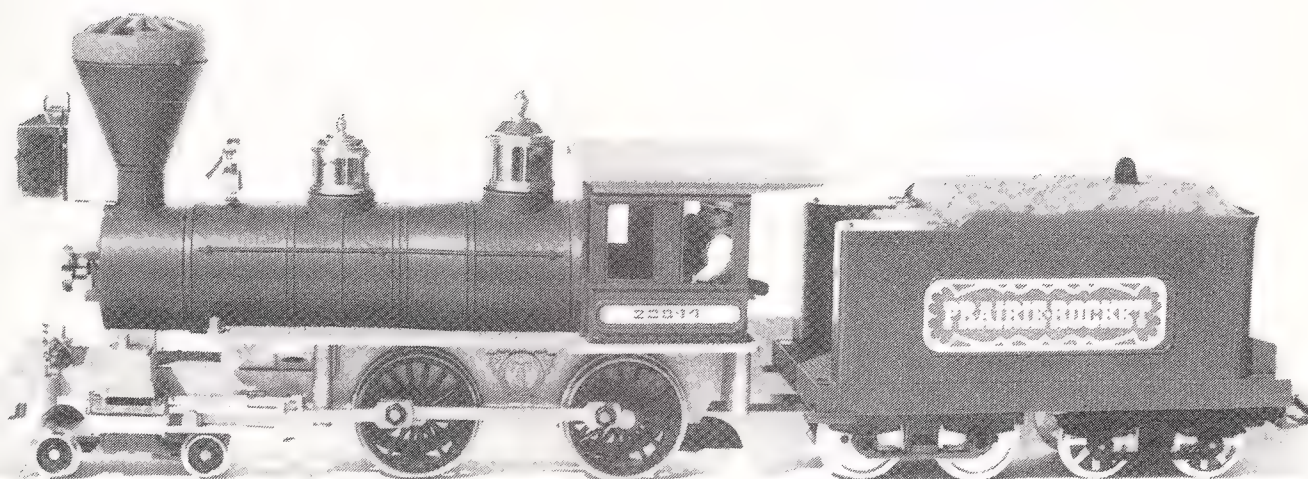


Photo A

THE PRAIRIE ROCKET — MODIFICATION

A conversion in 'O' scale by Paul Garrett.

Some time ago, when my son was into Cowboys and Indians (the plastic 'Timpo' type), he was presented with the Prairie Rocket set. At the same time, I was experimenting with clockwork propulsion for an O gauge loco to run on Lima track. As the Lima track allowed for more than the nominal oval as provided with the plastic set, I investigated the feasibility of re-wheeling the Rocket to conform with 'fine scale' dimensions of the Lima track.

The loco driving wheels are 5'0" CCW fine scale drivers using normal axles supplied with these wheels. They fit into the Rocket frame without much trouble (maybe a little easing of the bearing surfaces). The pony truck wheels are Wrenn 12mm wheels push-fitted onto axles made from 2.5mm plastic rod and cut to length. The journals for these axles may have to be eased out as well. The driving wheels were coupled by using the original coupling rods and pins. The plastic pins are drilled to accept a 10 BA bolt which is supplied with the wheels — the steel bolt (pin) can be seen in the large photo (Photo A) in the centre of the black plastic pin. Both engine and pony truck need some weight to keep them on the track.

The tender is a different kettle of fish. Firstly, remove all the plastic wheels and discard those from the rear bogie (truck). The wheels will be replaced by 25mm Jacksons wheels at the front and 21mm at the back. The front axles are separated from their wheels by prising the wheels off — carefully — as we will need to use the moulded-on gear and the three locating lugs. 25mm Jacksons solid wheels are used to replace the discarded plastic 'tyre'. The new metal wheel is drilled in three places so that the lugs on the gear wheel (and the disc on the other end of the axle) fit through the wheel (Photo B). The centre axle hole should not need enlarging as it will fit onto the projecting plastic axle. The bogie (truck) cross bar will have to be cut back slightly to clear the new wheels (Photo C). All the axles/wheels are then clip-fitted back onto their bogies. The rear

bearing holes will need some packing as the Jacksons axle is considerably smaller than the hole. The difference in wheel diameters is noticeable, but to allow the gear wheel to clear track etc., the front wheels have to be 25mm in diameter and to eliminate carving into the battery box, the rear wheels have to be 21mm in diameter — I have thought of dispensing with the battery drive and using the track to provide power (which should be quite simply done) but that eliminates some of the flexibility of battery drive. The rear bogie may have to have a washer between it and the tender chassis to even up the whole thing but that is up to you.

The carriage and caboose bogie wheels are just a straight swap with Jacksons — remembering the small axle and the need to reduce the size of the journal hole in the plastic bogie frames. ■

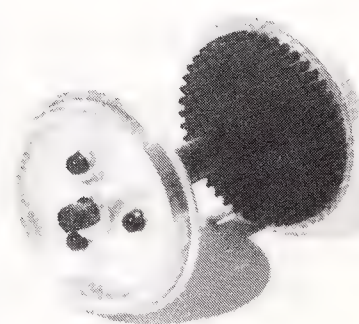


Photo B



Photo C

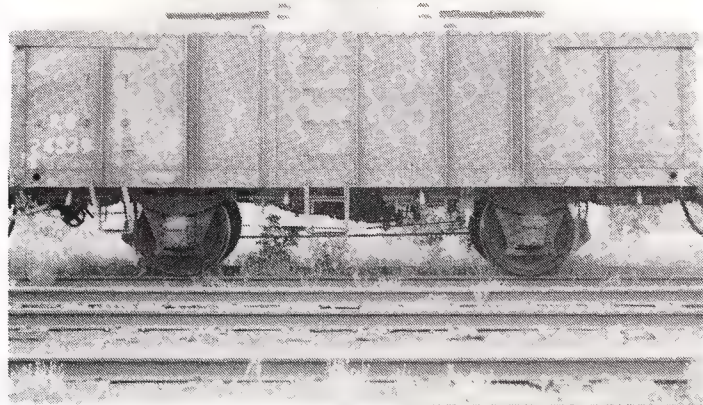
RU24539

By Phil Curnow.

When TRAX released their model kit of the NSW four wheeled wheat hopper class RU, it reminded me of a visit to Enfield years ago. I was wandering around among the buildings and old wagons when a rake of wagons began to move nearby. As the last hopper slowed to a stop a strange looking wagon was visible a couple of tracks beyond. It was an RU but had sloping ends, and before the nearer wagons began to move again I managed to add one more oddity to the photo collection.

I intended bashing a slope ended RU from the one piece epoxy cast kits released many years by, I think, MRC Kits. The project faded from my mind for a few years before TRAX revived it. I still haven't located any more info about the vehicle and still have only the one photo of it. Perhaps a reader will be able to provide us all with the how, when and where of this conversion.

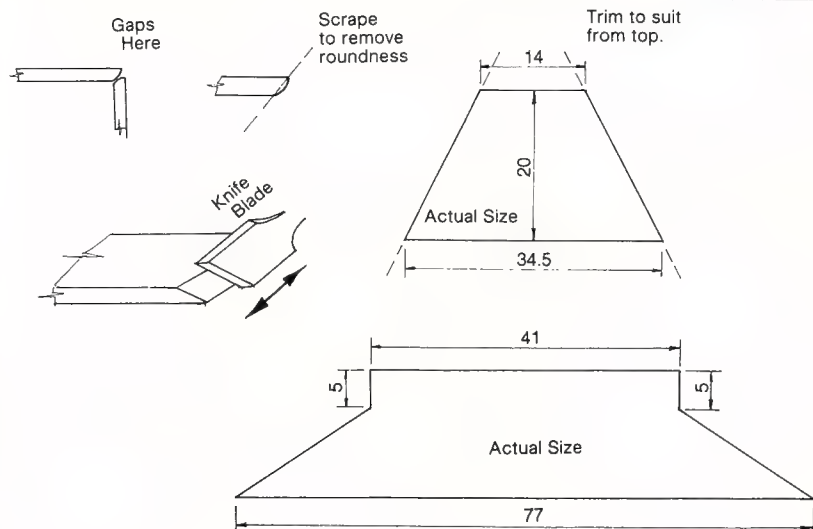
I assembled a standard RU as per the instructions and added detail such as brake handle, brake shoes, grab handles and steps and also the underfloor hoppers using a Data Sheets plan for info. This kit assembles fairly easily; however I suggest you examine the joins before adding glue. Mine were not flat on the sloped gluing faces so the edge is not tight and leaves small gaps which I will have to fill. You could avoid this by scraping a knife blade along the glue faces to remove any unevenness. Another suggestion concerns the row of hand-rails up the sides. TRAX have omitted any markings for locating holes so you either do them by hand and risk botching them as I did or else make a jig. For a jig you could use some 0.010" brass and bend it to a right angle, then locate and carefully drill the holes. To use it



RU24539 at Narrabri West in October 1979. Photo by Col Heness.



In February 1974 I found RU24539 at Enfield when another hopper was moved during a shunt.



Approximate Shape for roof of RU 24539.

All Dimensions in Millimetres

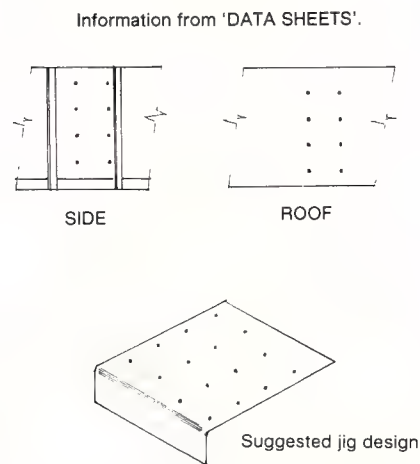
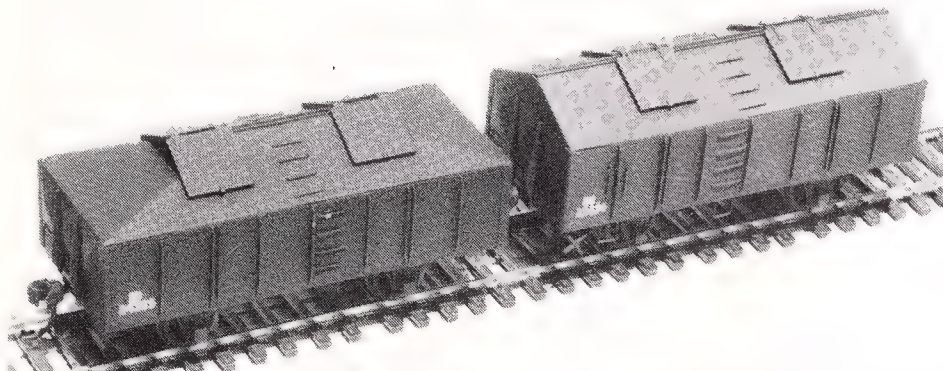


Diagram of Sides and Layout of Jigs.

place the turned edge against the edge of the plastic and you will get your handrails in the correct place.

Having only a grainy photo of the side of

RU24539, I had to make a few guesstimations so if this should satisfy the rivet counter it will be a pure fluke. Perhaps the method will help someone with another project, so here goes.



Two views of the modified RU and one that was assembled as per the instructions and then had extra details added.



The slope meets the hopper lid about half-way along the edge of the lid. Without glue, position a lid onto one side of the roof in the place indicated in the instructions. Mark the point of intersection with a pin point. Common-sense says the slope won't continue under the lid so this gives the shape in the drawing. Carefully repeat the process at the other end to make sure both slopes will be symmetrical. Now hold the pair of sides together and cut them both to the same shape. Remove the pointed section from each wagon end section.

The end piece will be needed under the lids so trim the inside of the vertical cut you made to the side so that the end will be a tight piece. Similarly, chamfer the inside of the sloped cut. Now all the pieces can be assembled ready to install the sloped section. Before you shorten the channel along the roof peak remember to allow for the lids which haven't been added as yet.

I found that the easiest way to make the slope sections was to cut a triangle of 0.020" plastic longer than required. Now carefully trim from the top until it is a neat fit under the lids. Now cut the edge which meets the ends. Chamfer as required and glue into place. Lightly sand the joints and fill with body filler if necessary.

From here you can detail the vehicle as much as you choose. I used some old North Yard wheels, Mnj decals and Kadec couplers. Brake shoes and underfloor hopper doors will be added from the scrapbox.

AMRM NEWS

This Issue.

This issue will be smaller and a lot earlier than usual. The early publication date is brought about by one of our workers deciding to have a holiday (The boss is having a break — Editor). The small size is also brought about by the fact that two of our workers managed to get ill on the publication deadline, severely limiting their regular contributions. Unfortunately, while AMRM is run by volunteers we will have to live with these limitations.

Next Issue.

Next issue should be published around the end of November. Sorry about the gap but we hope you may put the time to good use by writing an article or two for AMRM. A lengthy construction article or a simple hint on how you achieve some aspect on your railway is of interest to readers. Please help to fill the pages of AMRM. The advertising deadline for the December issue is still October 22, 1983.

New Sections.

With this issue we include a new regular feature 'PREVIEW'. This section will detail new models on the Australian and world scene. Manufacturers and importers are invited to make use of the section. Products will be covered generally with a photograph and some brief notes.

Back Issues.

Just a brief note to warn readers that stocks of some issues are now very low. We anticipate having to withdraw most issues below Issue 90 before the year is out. If any reader is slowly building up a collection of AMRMs, be warned, these copies will be out of print very soon.

Magazine Deliveries.

There have been a few delivery problems with the last few issues of AMRM. Bluntly put, the magazine is arriving back from the printers before we can complete the delivery preparations. This has been brought about by the use of the computer for generating our typesetting. In the past we would have to wait up to ten days for the typesetting, but now we get it back in a few hours. In the past we used this period to prepare for the delivery of the magazine — invoices, delivery labels, subscription update, etc.. We now face the problem of having the magazine on hand up to a week before we can deliver it to any of our outlets.

The objective of AMRM, re deliveries, is to get

the magazine to all agencies so that the issue can be released on the same day. Unfortunately there are restrictions that hinder this objective. With subscriptions, the dispatching organisation requires all update information over a week before dispatch. Unfortunately the same AMRM crew members handle the preparation of the magazine as well as the organisation of the subscription update. The crew who pack the magazine for the hobby shops can only get together on a Friday evening, and so if the magazine arrives on the Monday it has to wait till the following Friday before dispatch can commence, except of course unless the packing crew are involved in an exhibition on the Friday evening, when packing has to wait until the following Friday. Then there is Gordon and Gotch, who seems to be able to get the magazine across Australia within a few days of receiving delivery.

As mentioned, it is our intention to have all copies on sale or in mailboxes on the same day. We sometimes succeed.

We are however at present working on a scheme that will overcome some of these problems. Hopefully, before the year is out Graham Davis will have written and debugged our new subscription system, that will run on the AMRM computer, instead of the main frame at the mailing house. The scheduled commencement day will be in March 1984, unless we get ahead of planning.

The use of our own computer will give subscribers a better deal, where we will be readily able to update the files — changes of address, etc., moments before printing the mailing labels. At present the rule of day is four weeks prior to delivery. We will also be willing and able to correct spelling errors in names and addresses without too much expense or time loss. At present, a spelling error, brought about by the refusal of subscribers to clearly print their names and address, entails the subscriber being deleted and then put back on the files — it can and does get messy.

So — if you are a subscriber who has been putting up with incorrect spelling on your mailing label for a few issues, please do not hesitate to write now and let us know the error, and we will correct same, as the new system is being put into action.

As for the problem of disjointed delivery, you will have to bear with us for an issue or two until we can work out how to overcome all the problems.

What's in a Name? — Part 2.

Further to the comments last issue a few more

'names' have come to hand on the new State Rail Authority of New South Wales locomotive livery. 'Darrell Lea' and 'Lollipop' join 'Mickey Mouse' and 'Candy Stripe' as verbal connotations of the colour scheme. Only time will tell what name will stick. This raises a subject that can at times be the ire of many. What term do we use? The 'name' given by the modeller/enthusiast or the 'name' given by the rail worker.

In recent years some enthusiast magazines have been enforcing a rigid line that only 'current day terms — metric and all' should be used in publications. This is despite the fact that the railway staff were still using the old terminology. Regardless to change, most industries hold onto the old terminology, and the railways are no different. Terminology is one of the romantic sides to railways and it seems ludicrous that a few interested onlookers should enforce a policy of 'you shall only read what we say is right' instead of simple reporting.

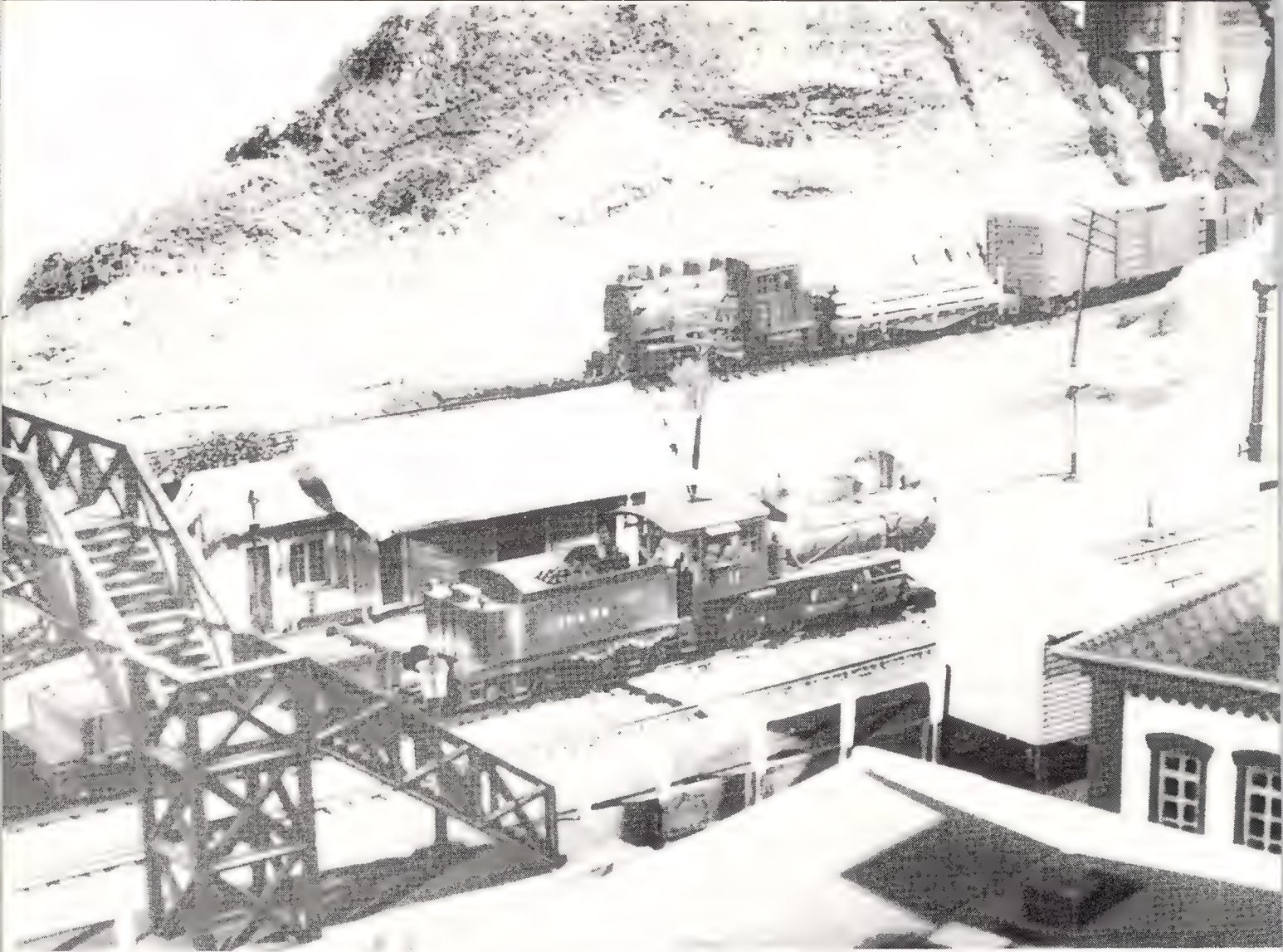
As previously mentioned, old terms stick — an example of this was heard recently in Brisbane when the electric car shed foreman informed Control that set # # was lit-up, inferring that the 3 car unit was ready to go. Another example was heard over TV recently when, during the engine drivers strike the union representative referred to the observer as 'the fireman'. By current day thinking they may be wrong, but who are we as modellers and enthusiasts to change their way of conversing. No wonder they call us the 'histericals'.

Prototype News.

Last issue we made mention of the demise of the South Maitland Railways, the Southern Aurora and The Spirit of Progress. Well, the SMR closed up shop as expected and there have been various press comments and rumours as to the eventual future of the SMR. Maybe a working museum, maybe a scrap yard? Only time will tell.

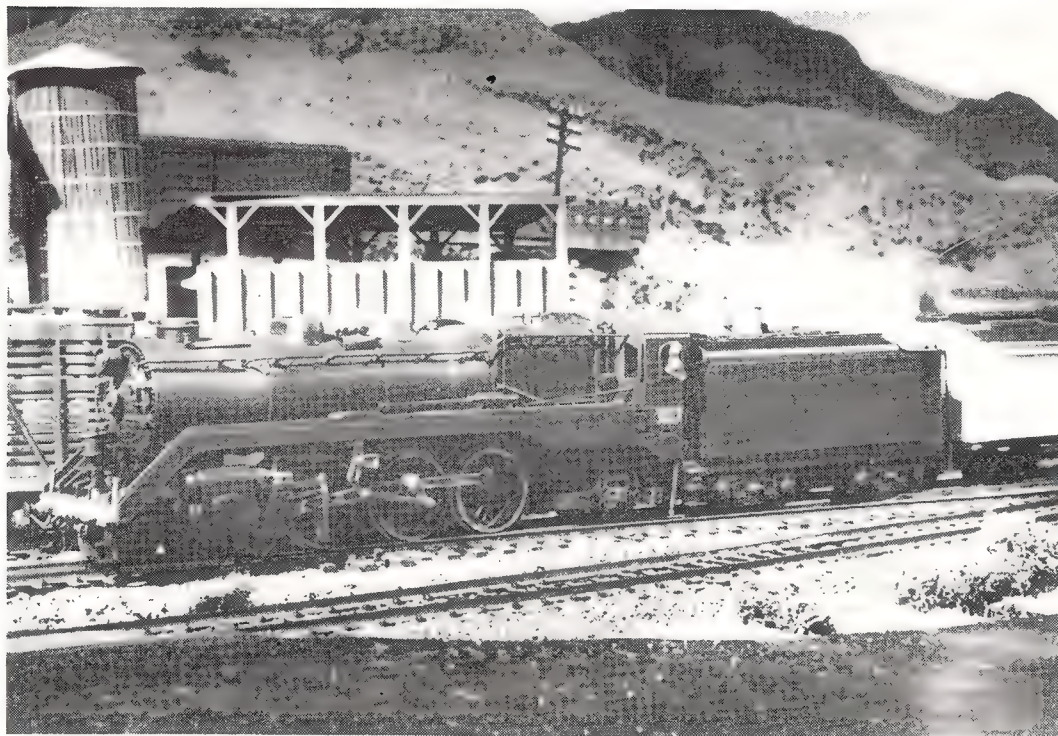
The Southern Aurora and Spirit of Progress did not amalgamate as suggested, but they did stop running for the duration of the NSW drives strike at least. The possibility of the amalgamation still exists and the economy will eventually decide the fate of these two 'name' trains. While on names it is interesting to note that a 'wag' on Sydney radio suggested that the proposed Sydney-Melbourne/Melbourne-Sydney (amalgamated SA/SOP) evening expresses be given the names of 'The Opportunity' and 'The Depression', the specific names

Continued on page 38.



SCENIC ROUTE

SCENIC ROUTE this issue comes from the camera and models of Phil Harrigan, who is developing his railway on a private enterprise theme in NSW in that a private company (Sandy Hollow and Maryvale Railroad) built and operated the Sandy Hollow/Maryvale line. This allows Phil to build models of his own choosing as well as being involved in models from the New South Wales railway system. The photographs were taken with a Pentax MX camera using Ilford FP4 film. The layout is owned and operated by the Wollongong Model Railway Club, which is exhibited in the NSW Illawarra area.

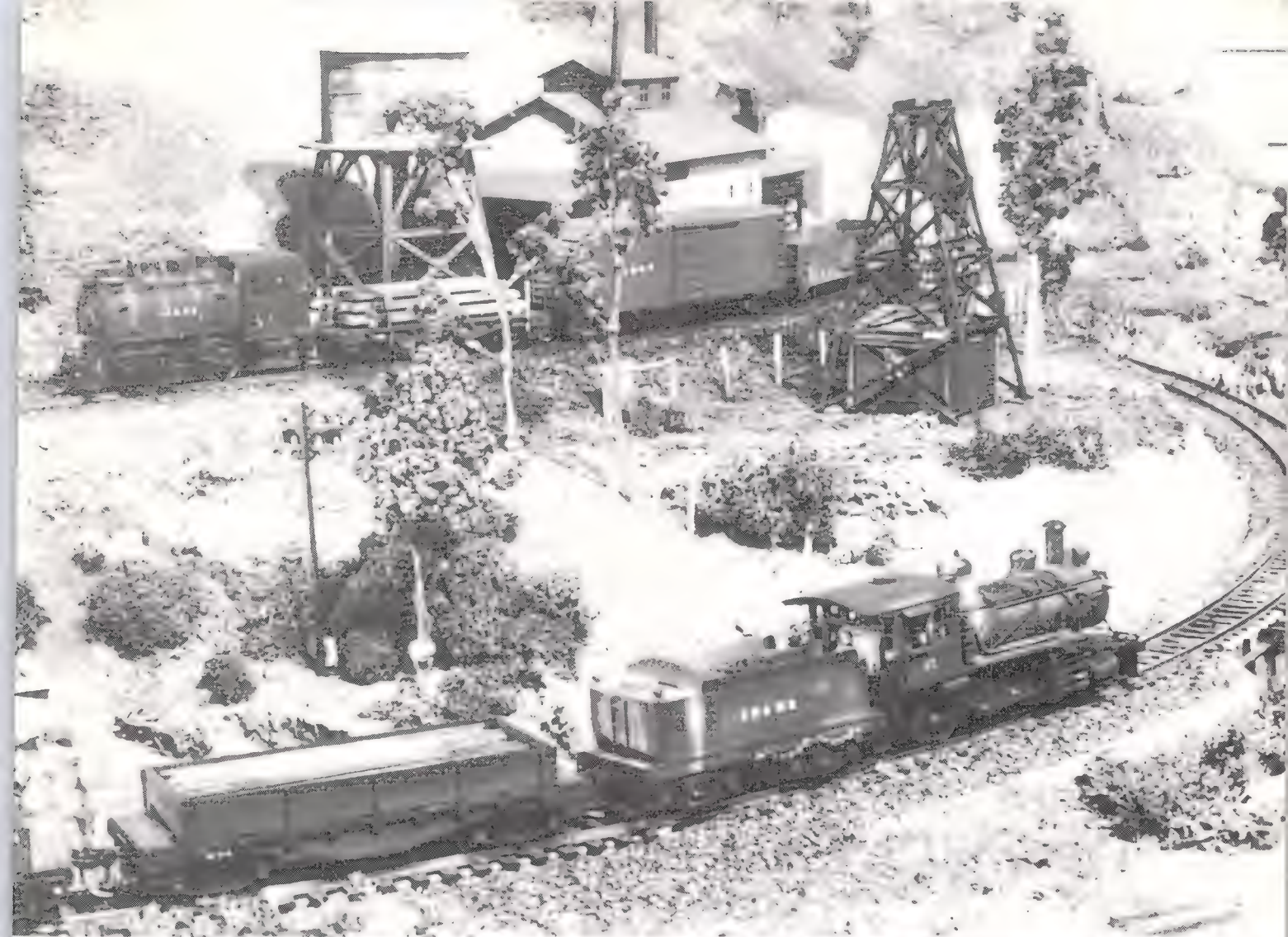


Above: SH&MR No 12 Baldwin 2-8-0 (Roundhouse) waits patiently at Gum Creek station for the station shunter No 5 (Rivarossi 0-4-0) to bring down loaded wagons from the local sawmill and Heinz Pickle Plant. The wagons will become part of the daily pick-up goods heading east behind No 12.

Below left: The time is late 1968 and that noble sprinter 3827 has been relegated to express goods workings. The driver, keen to get home, cranes his neck so as to see the starting signal. The C38 is a first-run Model Dockyard model.

Above right: SM&MR No 12 heads off on the eastern pick-up goods while No 5 shunts the Heinz Pickle Plant at Gum Creek. Loco No 12 is a modified and detailed Roundhouse (MRC) Old Time 2-8-0 kit.

Below right: SH&MR 2-8-0 No 41 gently eases its train into Gum Creek station. In the background SH&MR heads off up the branch line. Locomotive No 41 is a Lambert (USA) Pennsylvania RR 2-8-0 Class H6sb slightly modified and detailed.



In amongst all the rejoicing about the 'flood' of new wagons and locos onto the Australian market there is, for me, a tinge of sadness. Many of the models and components don't appear to be compatible with one another or other available products. Already we are 'blessed' with kits requiring axles of different lengths, coupler mounting pads at different heights off the track, several wheel shapes (profiles) and bogies with different mounting methods and heights.

This situation could get totally out of the realms of commonsense and we may saddle ourselves with problems when kitbashing or brand mixing that will take a decade to solve. Before this happens I believe we all should take a good long look at what we are about.

Surely it would be better for all Australian modellers to debate the subject for a while then choose a set of recommendations that most, if not all, manufacturers will stick to when building for the Australian market. To get the ball rolling, I've strung together a few ideas for you all to toss around. Hopefully you will feel obliged to write to AMRM and the major clubs and associations and say what you believe should be done for the benefit of all.

IS THERE A PRECEDENT?

Before I start earbashing you with my ideas, let's take a look overseas. Modellers in Europe, Britain and the USA/Canada have standards and recommendations from their own associations to guide them. Each of these markets is mostly self-sufficient and so, apart from Rivarossi of Europe building for AHM in the USA, there is not much mixing of large volumes of equipment between these areas. As it happens, each region has different standards to be followed and they are not totally compatible.

Unlike overseas modellers, we in Australia are not so lucky as a lot of our modelling supplies are obtained from all three regions, with a resulting clash of standards. I believe the apparent differences among locally produced kits and accessories is the result of this intermixing of overseas standards.

Our potential market would be only a drop

in the proverbial bucket in the eyes of overseas manufacturers, but I doubt if it will grow very rapidly while this compatibility problem remains. Why? New modellers soon confront the confusion and problems to be solved in couplers, axle lengths, wheel profiles etc. and seek a less confusing hobby such as leaning on the bar or collecting beer labels!

The overseas regions developed their own standards for the following:

- (a) wheels;
 - (b) couplers;
 - (c) track dimensions;
- and also in some cases have recommendations for construction and dimensions of such accessories as:
- (d) bogie mounts;
 - (e) chassis height;
 - (f) wagon weight;
- and so on.

In the accompanying photos I have tried to show some variations, but to briefly summarise let's look at choices in the HO/OO field.

(a) Wheels

The depth of the flange varies from Europe's 0.060" to 0.025" of the USA, with some specialist finer flanges particularly among England's P4 groups. Only some wheels have the curved area or fillet where the flange meets the tread. The flange width and tread width also vary as does the axle size.

(b) Couplers

Europeans choose a loop over a hook, the British favour the tension lock style, while the USA modeller chooses between the plastic X2F or various types of knuckle couplers.

(c) Scale

Europe and the USA use 3.5mm/ft known as HO scale with a 1/87th reduction. For historically valid reasons, the British chose 4mm/ft known as OO scale with a 1/72 reduction. This may not sound much of a difference, but a sixty foot coach will be an actual 60 x 0.5 30mm (approx. 1 1/4") longer if modelled in OO than if in HO, as well as wider and higher.

(d) Track

All three have accepted rails set 16.5mm apart, but the wheel profiles mean that there

WHICH WAY

are differences between pointwork made to the different standards to allow clearance for the rolling wheel.

I'll leave the discussion on bogie mounts etc. until later.

I understand that there are similar problems within the N and O scale markets also.

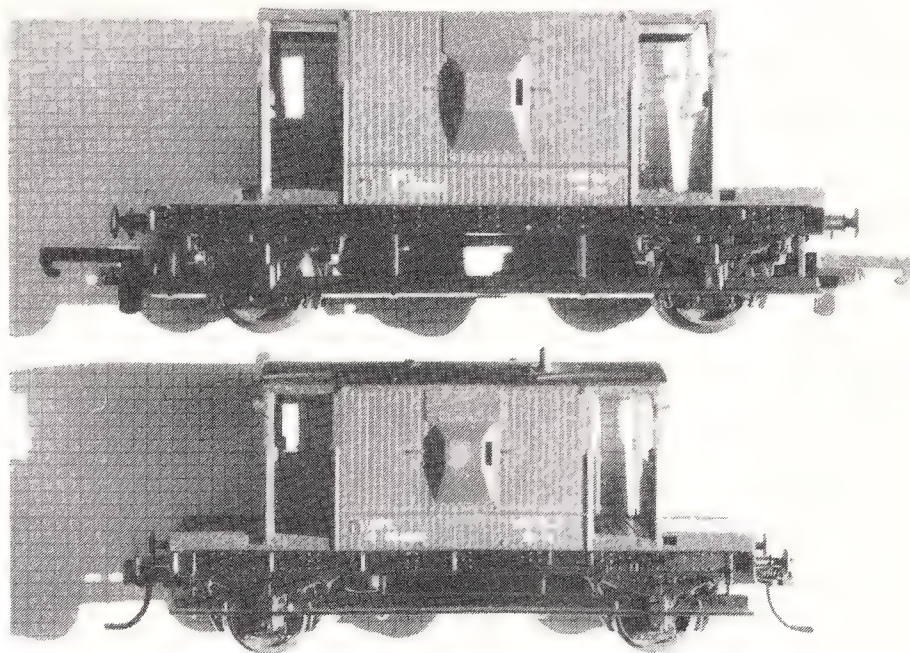
This intermixing of standards is most apparent for our loco builders who may use a combination such as Japanese gears, English wheels and American track and this can result in trouble at the pointwork. Why do we make this type of choice? Simply because very few of the driving wheels made for the USA market are available locally, whilst USA track and rollingstock wheels are available in most of our model railway hobby stores.

WHAT COULD WE HOPE TO GAIN?

Our market is too small to invent a complete new standard and see it accepted; however if we made a PRACTICAL selection from what is already available, with only a few changes to suit any special needs, we could get lucky. A look at what happened in the USA will give some clues. Just as we are finding now, so the Americans realised many years ago that they had to allow an element of chance when intermixing different brands. The NMRA (National Model Railroad Association) faced up to this problem and developed a set of standards intended as mandatory requirements and some supporting recommendations for each area of concern. As an example, wheels are covered by standard S4 which includes width and a flange depth of 0.035". Recommended Practice RP25 listed a flange depth of 0.25", a specific fillet radius etc.

A manufacturer can use both S4 and RP25 in producing his wheels and if they conform he can obtain approval to use the NMRA's seal of approval in his advertising. So what? Well, the standards for bogies allow for wheels made to S4/RP25 so a modeller soon learns that any brand of NMRA approved wheel will fit any NMRA bogie. Taking this a few steps further, the use of NMRA approved bogie mounting bolsters with these wheels and bogies will mean that the coupler height will be correct for the X2F and Kadees. Goodbye confusions. After a while you will realise, as I have, that it doesn't matter what type of wagon you use; you can still have the correct coupler height by using NMRA components. In AMRM September/October 1982 is a short illustrated article on modifying Lima's ELX to NMRA standards. Stated very briefly, it is just remove bogies, remove old bogie mount, replace with North Eastern bolster and pack it down to nearly flush with bottom of side sill, attach Roundhouse bogies and fit Kadees and then . . . *Voila!* The trap to avoid is that the normal American railroad freight wheel was 33", yet in Australia it is 36" so if you favour the larger wheel you will need to make your own allowances, but at least it is a constant 1 1/2 scale inches.

This all sounds so easy that you may begin to wonder where the sting in the tail could be. Yes, there are exceptions to the NMRA approval scheme as I understand it. Some manufacturers, such as Central Valley, made their product (wheels) finer than NMRA yet still received the approval, whilst others made their's coarser and missed out. In that case "let the buyer beware" is a valid comment because he MAY have to do some major modifications to fit NMRA couplers etc. You may freely intermix wheels and bogies made by Athearn, Roundhouse, Kadee, Central Valley



Scale

When Lima first entered the British prototype market it used HO scale but later changed to OO scale. Thus we can get the same vehicle built in two different scales. The smaller HO model in these photos has been fitted with NMRA wheels and Kadee couplers in place of the original and the roof is now painted black.

NOW?

By Phil Curnow

etc. but with AHM and Tyco "it ain't necessarily so". Judging by comments in the overseas press, and looking at their latest products, the latter two brands are moving more closely toward compatibility with the others.

Here in Australia we could also gain compatibility among different manufacturers and would not have to waste our time modifying brand 'X' to operate with brand 'Y'. In our small market I think compatibility would also help the manufacturers because, provided their's was a quality product, they would have a better sale potential. For example, I don't purchase one brand of local wheels because, although well made, they don't conform to the standards of track on the layouts I operate. In a much larger market they could happily survive while applying to a restricted range, but in Australia? I guess time will tell.

I don't claim to have a thorough knowledge of British or European standards simply because I don't follow either prototype or use much of their parts in my modelling. I do know that I prefer the NMRA results because of appearance, performance and practicality. I don't intend to make you wade through a page and a half of facts and figures about standards but make the claim that my choices are based on my years of experience in the hobby, as well as long discussions with practical modellers.

My Choices

As these are supposed to be PRACTICAL suggestions, I'll try to keep to what is preferred by many modellers and readily available, rather than what a particular club has chosen. After all, even the major associations — SCMRA and AMRA — don't agree on everything.

Scale

Let's stick to HO scale at 3.5mm/ft for Australian models and forever bury the HO/OO idea of about 3.75mm/ft and also OO at 4mm/ft. Surely it is reasonable for the buyer to expect models of the same item to be the same size. If a manufacturer wants to choose a weird scale (perhaps 'less popular' would be a kinder choice of words) then go right ahead but please don't expect everyone to follow suit or complain if the product doesn't sell as you hoped. If, as a modeller, you're bothered by the conversion scale, I suggest you invest a few dollars in a steel rule available from Walther's stockists.

Track

Rails set 16.5mm apart appear to be the accepted standard for ready made types, with flat bottom rail and preferably made from nickel silver. Sleepers should be designed so that the curve doesn't tighten on shallow curves. Rail size could be a cause for discussion. Code 100 at .100" high appears to be the popular choice because of the large range of trackwork available 'off the shelf'. However I would prefer our recommendation to be code 70 which is closer to the scale size of Australia's most common main line 94lb/yard rail. Code 100 brings to mind those adverts of a few years ago about why we run scale trains on high girders. The spikes should be small enough to clear our chosen wheel flange.

Wheels

Now for an argument on the 'nitty-gritties'. My practical choice is to adopt the NMRA S4/RP25. The profile is already available in a reasonable range and compatible code 100

and code 70 track is available. Much of the American wheel and bogie product range is readily usable for Australian prototype and is already to scale.

The chief reason I have heard for adopting a deeper European or British flange seems to be that the 'toy trade' requires them to reduce derailments on little Johnnie's Christmas tree layout laid on the floor. If we can forget the dust and cat fur already on the floor, I have to ask, "What happens to little Chuck's Athearn wagons?" If they fell off at every curve, surely Tyco would not be almost alone in using deep flanges for the American market. For the combination of performance and appearance I choose NMRA wheels.

There are some interesting developments overseas nowadays that may affect our choice. There is a possibility of refining of the RP25 profile following success with narrower tread and flange wheels made for HOn3 users since RP25 was developed. Already Central Valley has adopted the narrower tread for their wheels.

In Britain the 'scale at all costs' modellers have developed the incredibly fine P4 wheel profile which must be close to the ultimate. Unfortunately, it is so fine that chassis assembly, compensation of axle boxes and the track laying skill required is such that I could

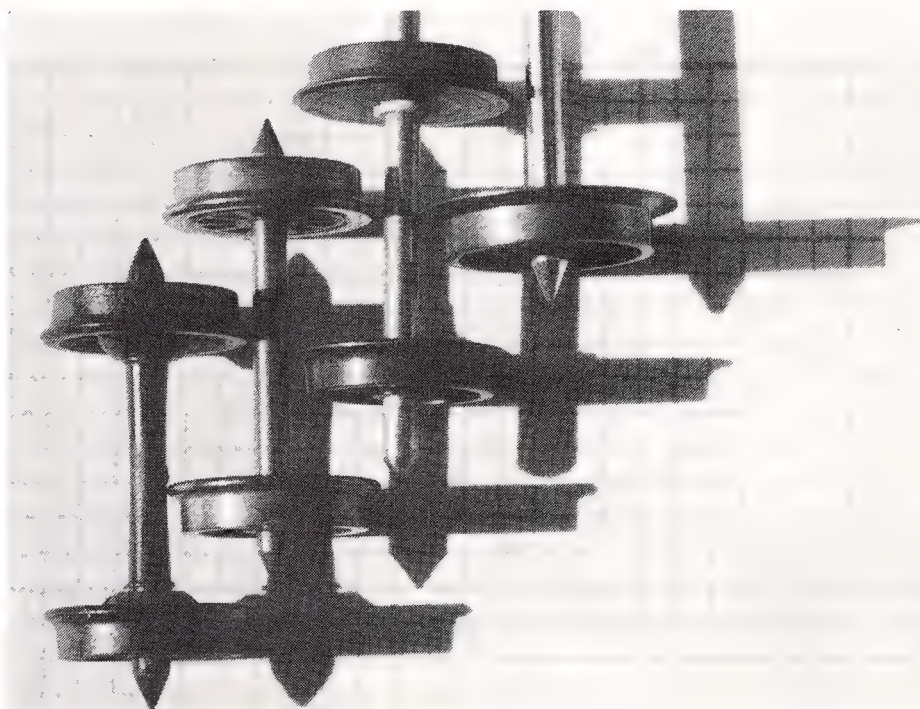
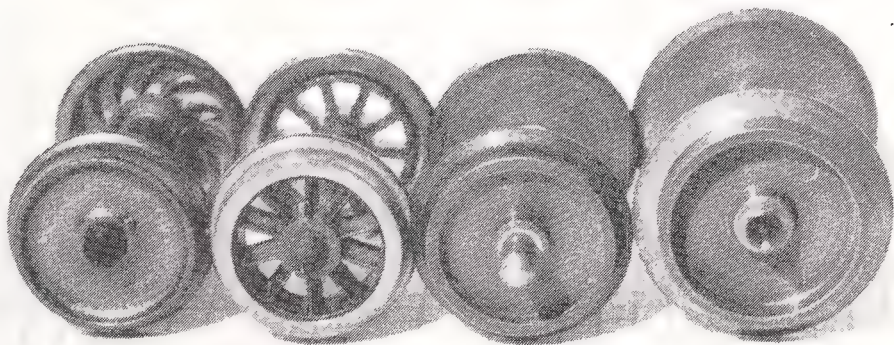
not consider it as a practical choice for us. The coarser BRMSB wheel is currently being reviewed and we can hope for a wheel that performs like the RP25.

Whatever we choose, it has to be suitable for both code 70 and 100 track and require minimal modification of existing pointwork. I would prefer us to adopt the NMRA compatible HOn3 style because it is looking to the future and is still practical.

Axles

With axle length we appear to have a problem, as noted by Ross Hurley in the June 1982 AMRM. If we use the NMRA axle length, our axle boxes don't sit far enough in from the side of the vehicle on four wheelers. The USA modeller only has bogies to contend with so he doesn't share our problem. I agree that a shorter axle is desirable but we would still need an NMRA length axle for spoked wheels in bogies so that means the manufacturer being faced with two axles for a small market. Is that a practical choice? One manufacturer has now released a range of axle lengths as Ross suggested.

The ends should be pointed but more of that later. To assist the modellers using magnetic uncoupling, the axles should be non-magnetic. We need to choose an axle diameter



Wheels

These two photos show a comparison of the flange, fillet and axle of four different brands of wheels. From the left are Kadee, North Yard (a thinner tyre style has since been released), Jackson and Lima. The silhouette gives only a comparison as the camera angle will distort each slightly.

also of about 2mm to avoid the really bulky look when viewed end on.

Point Work

This article is beginning to sound like a political broadcast . . . "All the way with the USA". If we choose NMRA wheels we have to follow their pointwork also.

To cater for their profile, the NMRA has a wider 'back to back' than the average British wheel and so the clearance through the point frog is narrower. The bulk of European wheels have a similar B-B and will pass through code 100 NMRA pointwork but hit the spikes on code 70. The British wheels often hit the check rails of NMRA points.

Our choice may need to be a compromise if it is to be practical. British wheels through American points hit checkrails; American through British can be sloppy enough for the flange to hit the point of the frog and derail. Some points have been designed to take anything but these are usually very rough when the wagon is pulled and a good bet for a derailment if the wagon is pushed.

The only choice is NMRA track with advice to owners of British pointwork on how to shim the clearances so that the check rail will guide the NMRA flange past the frog.

Another must is that the frog should be electrified and not a dead patch. Our Australian trains don't travel as fast as British or European so why encourage new modellers to expect that momentum at slow speed will still carry their loco over dead frogs.

Couplers

Now for more howls of protest — which piece of twisted wire or distorted plastic is best? As mentioned previously, each modelling region has a different coupler. Here is where my personal choice could not be considered as practical for Australian modellers in general. I use Kadee's knuckle operating couplers and think they're the closest thing to magic I've seen. Unfortunately they're too expensive to be considered a practical choice for Australia's coupler.

The other American coupler is the plastic X2F which is not much good for shunting layouts in my experience. It does use the same height off the track and shape of the coupler pocket so that upgrading to Kadee involves only cost rather than major modifications. Another example of the advantage of compatible components.

What we need is a practical, cheap coupler

that will allow easy upgrading to Kadees if required. AHM has just announced a new coupler that will do that, but we still have a problem to solve. The undisputed leader in the ready to run market of Australian models is Lima and they use a Continental coupler. Any practical choice must take this into account but the mounting of these couplers is not always easy for a scratchbuilder.

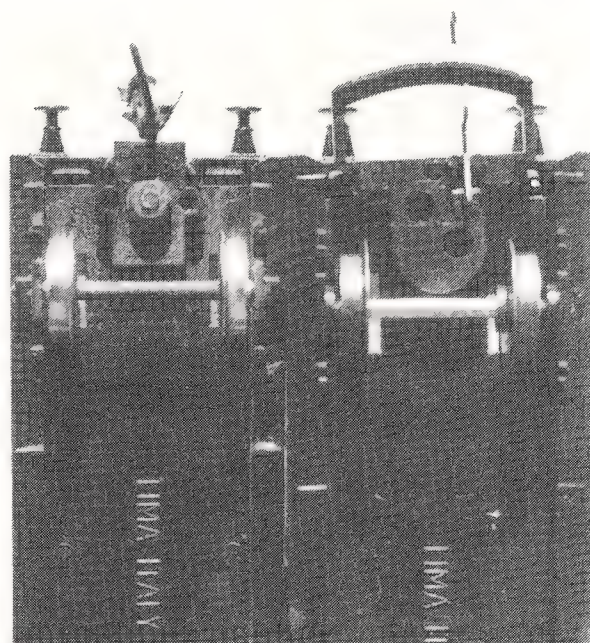
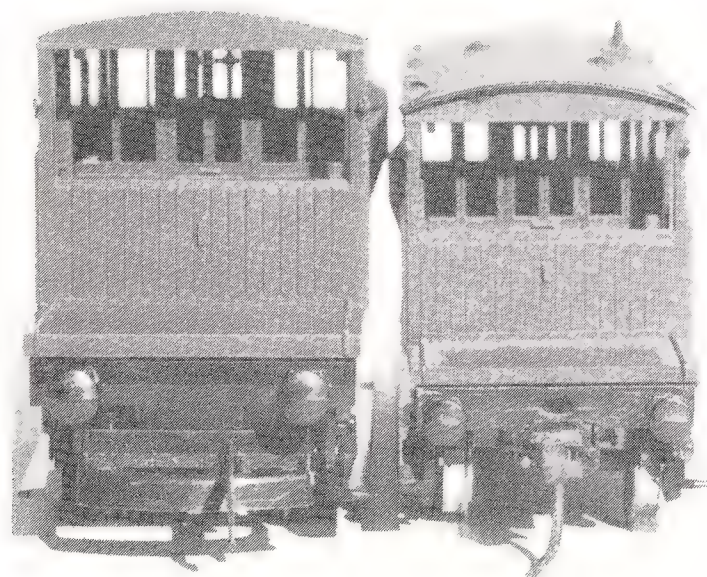
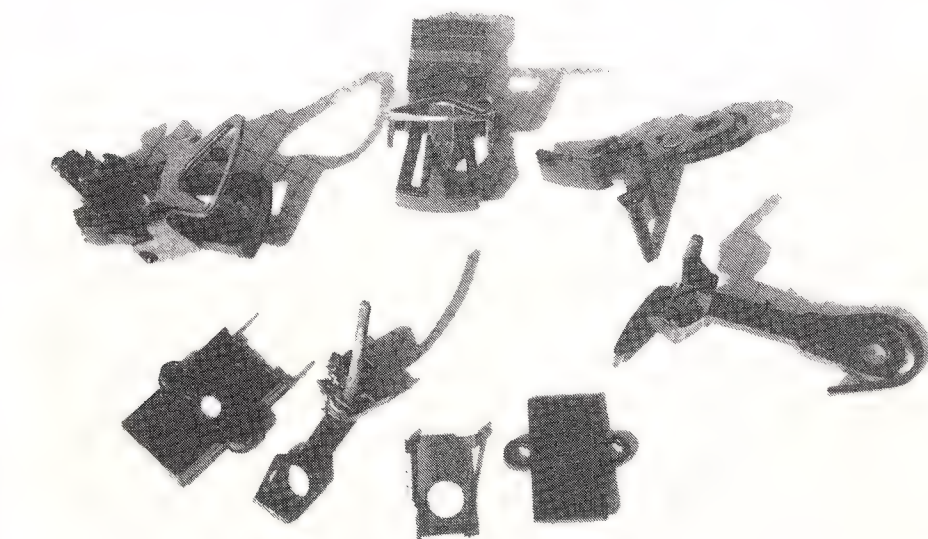
Perhaps this is just a pipe dream but I would like to see a locally made European style coupler head that fits into an NMRA coupler pocket set at NMRA height. If this idea were adopted, a local manufacturer would include a coupler pocket at NMRA height in his casting and supply the coupler to be fitted. A Lima modeller would be able to use the model it with his gear, while a USA coupled layout would replace the European coupler head with X2F or Kadee as required. I cannot see Lima totally replacing their coupler with an X2F type for Australia because of compatibility problems within their own range. Lima might consider a compromise like I've suggested for its Australian models if the demand were strong enough from modellers. The company appears to be prepared to consider the needs of even its minor markets. Rivarossi, through AHM, reduced its flange depth from 0.060" to 0.039" in response to calls from its American market.

Regardless of this, I would like to see the method of mounting the coupler being on the wagon body rather than 'Talگو' style on the bogie, with the possible exception of coaches. Talگو mount is reasonable while the wagon is pulled but when it is pushed through pointwork the resulting derailments are excessive. The flange is forced rather than guided and picks joints and frogs with gay abandon. Body mounted couplers work fine on Australia's usual length wagons except perhaps the old ComRail lengthy extravaganzas and even then, I've heard of few hassles when pushing them through sharply curved number 4 points.

Bogies

I've already commented on the similarity of several USA style bogies to those used in Australia so it should come as no surprise that I suggest we follow the NMRA. I suggest that an Australian manufacturer should make his bogies standard with other local manufacturers in the following areas:

(1) height of mounting pad from the centre,



Couplers

Lima's OO van is fitted with a tension lock coupling to suit the British market. The owner of the smaller HO scale model has fitted Kadee couplers further away from the end sill than is usual to avoid buffer lock.

A selection of couplers. The four pieces at the bottom are the components of a Kadee being the cover, coupler, spring and pivotplate. Going clockwise are two versions of Lima's continental coupler and then two versions of the American X2F style.

which should be the NMRA standard.

- (2) diameter of the hole for the mounting screws, and
- (3) axle length, which should be the NMRA length, unless the shorter Hurley style becomes the standard by popular request.

My preference for the American mounting screw instead of the Continental twin plastic prongs method of mounting bogies is simply because they can be undone and the bogies replaced. To swap Continental bogies due to poor scale or incorrect shape is far more complicated because the mounting socket is not available as a spare part. The kitbasher now has to replace the bolster and the bogie or invent some type of adaptor.

OTHER REQUIREMENTS

So far we've discussed what might be considered the more critical areas for compatibility. There are a few other facets that we need also to consider.

(a) Weight

Now for uproar number three. Weighting is a subject of great debate among modellers and opinions seem to depend entirely on how we use our models. The need for weight is most obvious when doing a lot of shunting through pointwork as my friends and I do, so that defines my requirement. Weight is of little importance to modellers who almost exclusively run their trains forward unless they start mixing groups of heavy and light wagons. For those who find that spectacular crashes help put the fun in their hobby, the less weight the better.

Most manufacturers of ready-to-run (RTR) models include a weight either as a cast metal chassis or separate metal piece to fit into a specially designed pocket in the chassis or body. They apparently are agreed that weight is necessary but the question becomes ... how much?

The NMRA has really investigated this over many years and has a stated formula of total weight of a vehicle should be 1oz. plus an additional half oz. for each running inch of length. For example, a 40' wagon's desirable weight would be $1 + (6 \times \frac{1}{2}) = 4\text{oz.}$ because it is approximately 6" long. In metric it is $30 + (L \times 6) = 120\text{gms}$ where L is the length in centimetres, and reducing the grams per centimetre to the equivalent of $\frac{1}{2}\text{oz}$ per inch.

NMRA says that to lighten this is to increase the risk of derailments, while increasing it only loads the engine too much. Some Australian modellers have begun to question whether, with our small locos and low weight on the drivers, this weight is too heavy, considering the free running wheels and bogies we use. I haven't noticed any major problem nor any great advantage from a lighter weight simply because the Ablo operating train length is 10 wagons due to standing room in loops and sidings. The weight still has to allow for the optimum weight for Kadees being $2\frac{1}{2}\text{oz.}$ (45g). Below this the Kadee will not couple properly at first attempt and no doubt there is an optimum for other couplers as well.

Is weight necessary? I know of several examples that indicate an NMRA style of weight code is definitely necessary.

- (1) On Bill Coles' layout there was a scratchbuilt FC flatwagon with very little weight (approximately half NMRA) and this cursed wagon bit the ballast at many of the points. The problem was solved by fitting it with a permanent weighted container.
- (2) A few years ago the SARMA members had a cattle wagon construction program and some were weighted and some not. Came an exhibition and a chance to show them all in action. A couple of diesels and a string of about forty vans was really impressive until,

at the first curve, the wagons in the centre of the train landed on their side. The reason proved to be that the locos at one end and the heavy wagons at the other pulled the light wagons off in an attempt to straighten the curve.

- (3) Frank West is building a layout based on Western Pacific operating procedure around Keddie and little shunting is required. The grades are long, the curves are shallow and the track is well laid. Several times visitors have assembled 130 NMRA weighted wagons into a train, coupled on two Cary bodied diesels and let them build up to full speed for several laps with no derailment. An impressive sight. They were all fitted with Kadee and Central Valley wheels.

- (4) A few years ago an American manufacturer of controllers used a club layout, several hundred hoppers and a string of diesels to advertise the performance of the newest controller. It also showed a lack of accidents judging by reports in magazines.

Examples 3 and 4 sound impressive; however the point to note is that the wagons were either by the one manufacturer or similarly weighted. We need to be able to retain this even weighting when we mix wagons made by different manufacturers. I have read of layouts that operate well with a small batch of light wagons in the fleet but these are usually noted in some way and treated differently to the rest. One owner painted coupler glad hands orange for lighter wagons and decreed they had to be last in any train. This may introduce a challenge to some modellers but I don't think it could be called a practical recommendation for us all to follow.

The problem for the Australian kit manufacturer is to allow a weight to be fitted. Open wagons will prove the major problem because the buyer will more than likely want to run it empty without a rough piece of lead in view. A look at RTR models will show a few possible answers including a false floor or a shallower than scale floor to allow room for the pocket.

Oh yes, if you have NMRA weighted wagons and are still getting many derailments, first check for crud on your wheels or incorrect back to back before screaming "Curnow is wrong".

Australian modellers will have to carve our own trail in determining a correct weight for four wheelers. The NMRA didn't need to consider this for 'bogies only' railroading. The optimum weight for Kadees is $2\frac{1}{2}\text{oz.}$ so I aim to get at least 2oz. into my four wheelers. This is approximately half the weight of a forty footer so the relationship of train weight to length stays about the same for our locos. The wagons usually couple at first attempt without having to chase them around the yard.

Axle Needle Points and End Play

By now most manufacturers of wheels agree that needle pointed axles running in suitably coned bearings are best. True, some stub axles are made especially in Japan but needle points are in the vast majority.

Both Britain and the USA have a 55 degree cone and at least a 56 degree bearing but there the approach changes. As pointed out in Ross Hurley's treatise on the need for a short axle, many British wheels are supplied with a brass bearing which has a flange to seat cleanly against the inside of the axle box. Axles are mostly steel and the combination with the brass bearing gives a free running vehicle. The diameter of the bearing has now apparently been accepted as a standard and kit manufacturers include a suitable hole in their axleboxes.

In the USA they don't use bearings but instead make their axles from brass (Central Valley etc.) or delrin plastic (Kadee etc.) and run

them in metal bogie frames. Other manufacturers use steel axles with the bogie being made in slippery, long wearing delrin. In all cases there is a mix of materials to reduce friction and therefore reduce wear of either the axle or the bearing surface.

Here in Australia the production of injection moulded plastic kits is in its infancy and none of the kits that I know of have their axleboxes made of slippery delrin. This has caused some modellers to question the long term effects of running our steel axles in the kit's plain plastic axleboxes. I have heard predictions that the plain plastic will wear rapidly but have seen no proof of this. I understand the predictions are based on experience with the old plain plastic Airfix kits.

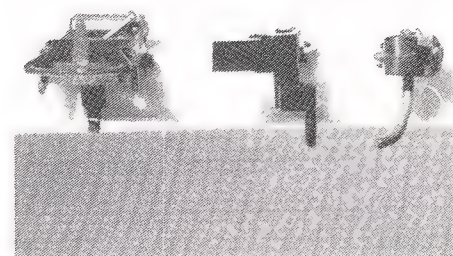
The possible solutions to this 'problem' are not simple. Sure, the kit manufacturer could make the sidesill/axlebox unit from delrin and the remainder from plain plastic but this will increase his costs in moulds and packaging and possibly plastic materials. Delrin is very difficult to stick to other material because of its slipperiness — the very reason why it is used for bogies. Another alternative is for a special bearing to be produced for our market by a 'back yarder' but it will have to be different to the British bearing because, due to our smaller scale, our axleboxes are closer together. To compensate for this the bearing cone needs to be sunk further into the cylindrical section if we are to retain the flange. I modify my bearings by knocking off the flange and filing the blind end off the cylinder but then they are not uniform size and give assembly problems. Not a practical solution to plan for modellers to butcher bearings. Until this shorter axle and/or altered bearing question is sorted out, the only practical suggestion is to add Kadee graphite powder to each axlebox.

Axle end play is necessary for free rolling but we cannot tolerate too much for several reasons, including:

- (1) Kadee couplers require the coupler head to be above the track centre line if reliable operation is to be achieved. Sloppy axles allow the coupler to wander from the centre which can certainly muck up your chances at coupling at first attempt. Other coupler types may not be so fussy but the practical limit for Kadees is about 0.5mm in four wheelers. This means we need the kit to be made of a plastic that does not 'move' (swell, shrink or twist) with temperature changes.
- (2) Very sloppy axles tend to ride into one axle box in preference to the other which then has less than its share of the weight. As if in revenge, that wheel bites the ballast at every opportunity. Peculiar habit really — you'd think the coned axlebox hole and axle points would centralise the axle but in practice it doesn't seem to be that way.

Easy Roller

This is merely a way of saying that the wagon should roll easily along the track. Some



Three styles of couplers — Lima, X2F and Kadee.

clubs in the USA say their bogie wagons have to roll without any help down a 1 in 50 grade. Perhaps with our fondness for four wheelers we need to make them a little more sluggish and say a grade of 1 in 30. That, with the suitable weight, should avoid chasing wagons around a layout trying to couple.

An important requirement of four wheelers in my experience is that they should run in a straight line across a table top. If they start to go in a curve it means that the axles are not parallel but splayed where the axleboxes are slightly closer together on one side than the other. This can result in problems going around curves. In one direction the wagon will free wheel but if you turn the wagon around it will run stiffly as the flange is now forced into the rail. This increases the risk of derailments also as the flange is aimed into rail joints.

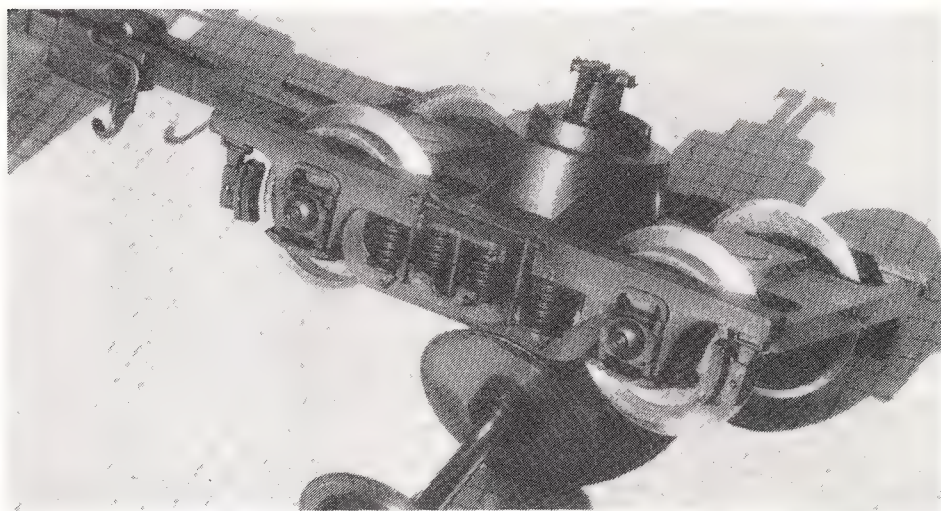
Bogie Mounts

I have already mentioned my preference for the USA choice of a screw into the bolster rather than the Continental idea of two plastic prongs into a special socket. The reason is that a scratchbuilder, kitbasher or whatever will want to change bogies if they are the wrong scale, wrong design or just badly made. Unfortunately the special socket is not yet available in Australia as a spare part, whereas the bolster and screw are.

As a refinement of the screw method, I favour a plastic collar that the bogie sits upon. The screw tightens into the collar and the threads don't rub on the bogie frame. The ultimate would be to have the collar with flange available separately so that washers could be slipped between it and the bolster to raise the body if necessary for the coupler height.

SUMMARY

Well, that should do for a start. Please think seriously about what has been mentioned in this article and discuss it with your friends and acquaintances. While I have chosen what I think would be practical recommendations, the



Bogie Mount

The two prong bogie mounting style preferred by some European manufacturers. A socket is formed in the floor of the vehicle.

final choice is yours, not mine. I sincerely hope that enough readers will send their opinions into AMRM and the various clubs and associations for a general opinion to be found. Then a list of practical recommendations could be prepared, printed in the various magazines and so made available to all manufacturers.

What we could hope to gain is that we may avoid the problems caused by manufacturers 'doing their own thing'. This would avoid compatibility problems where brand 'X' has to be extensively worked on to operate with brand 'Y'. A printed list would also give a measuring stick for future reviews of kits and parts.

How high should we aim? I believe we should aim for the best and most practical solution in each case rather than what may be convenient now. This is especially true with couplers and axles.

While it is true that the hobby section of the

market is small compared with the toy market in potential sales, we should aim to make it as easy as possible for the toy train owner to grow, if he wishes, into a hobby modeller. The NMRA reduced the hurdles he would face down to the minimum and hopefully we can do the same for our special case.

Why try to saddle the ready-to-run manufacturer with kitbashers' problems when they may be a small part of his market? I guess it could be called selfish but I believe that most of the parts and low volume accessories that can help make this an individual's hobby will be made by 'back yarders'. They are capable of filling in the small gaps in the big guys' production to the advantage of us all. Most 'back yarders' appear to regard model railways as a hobby rather than as a gaily coloured toy.

Think about it. The future of our hobby can be affected by what we choose to support with our money.

AMRM NEWS

Continued from page 31.

being applied to the direction of travel, and, of course, depending on the city you consider the best.

Narrow Gauge.

The Prospect Model Railway Club, becoming well known for its innovations to the hobby, especially in the exhibition field, added another few strings to its bow at this years exhibition. The highlights included the Kalmbach video movies on scenery and a couple of HO_N2½ narrow gauge layouts.

The layouts stole the show! This is surprising for Prospect has the reputation of being THE American (prototype) club in Sydney, and they have always used big displays to put forward this image. This year they invited what appeared to be the best HO_N2½ layout from Sydney and Melbourne. Sydney was represented by The Slimtracks Narrow Gauge Workshops layout, while Kingfield, Twinlakes and Maine represented Melbourne. Both layouts featured commercial components. On K,T & M it was a challenge to pick the origin of the structures and many of the public were involved in 'guessing the origin'.

K,T & M featured in the June issue of AMRM while photographs of the Slimlines layout appeared in the December 1982 and August 1983 issues. We hope to be able to present a feature article on the Slimlines version of the Rio Grande in a future issue.

This feast of fine narrow gauge layouts was a good follow up from Malcolm Furlow's scenery clinics last year and now doubt a good lead up to Garry Edlen's visit next year. A lesson that should have been learnt from the last two exhibitions though, is that the St.Patricks Hall at Blacktown is far too small to comfortably cater for the crowds that these events create.

Humour in the Hobby.

AMRM advocates that everyone should enjoy their hobby and to do this we need to inject as much humour as possible into every facet. If we make a bad mistake, learn by it by all means, but also make a joke of it. Learn to laugh at yourself and with others, it sure eases the tension of life.

In this vein it is interesting to look at various parts of the hobby and see the funny side. Things that may appear to be insulting or very serious may only be someones attempt to inject a bit of humour into the day. Take for instance the recent release of the Mansfield D50 from Korea. Included with the brass loco and tender was a magnifying glass in a small poly bag. Stuck to the side of the bag in clear computer dot matrix printer style was a label engraved — "For viewing fine detail".

Some modellers were inflamed by the 'insult', and others looked upon the object as a 'dig' at those who spend countless hours trying to find something wrong with the model. From the chuckles emitting from behind the shop counter there was little doubt that the lady of the establishment was behind the joke — and top marks to her.

The catch-cry of Model Railroader, the biggest model railway magazine in the world is, "Model Railroading is Fun", so let us all join in the fun and laugh a bit — Model Railways should be taken seriously but not solemnly.

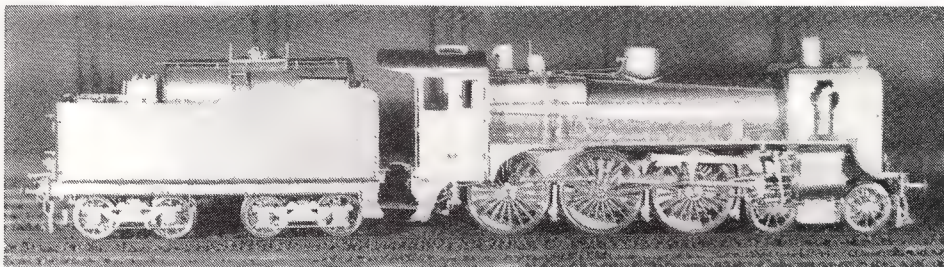
Diorama Contest.

In conjunction with the Australia Day Model Railway Exhibition in January 1984 the Epping Model Railway Club is organising an open competition for model dioramas on a railway subject. The diorama may be any scale, gauge or prototype with a maximum size of 1200mm by 600mm. For further details contact Doug Blunden on (02) 86 3432.

Magazine Binders.

The Eastern Division of the Southern Cross Model Railway Association has organised another shipment of binders for AMRM. They have a plastic cover and the individual copies are held in place by a steel rod. They are also good for other magazines, similar in size. Please note — they are NOT available from AMRM, or SCR Publications. The binders can

Continued on page 47.



V.R. A² by Broad Gauge Models.

RING FIELD MOTORS FOR O GAUGE

Over the years many O gauge modellers have made their own electric motors, often utilizing permanent magnets, armatures and other items from disposal stores. At the same time they have seen great progress made in the development of small motors with multi-slot armatures for the smaller gauges. Consequently many small O gauge models have been powered by HO motors.

The writer is one who, while in the past has made his own motors — with five slot armatures, is nevertheless always on the lookout for alternatives. One such alternative appeared recently when a large department store had a 'Special' of a power operated car radio antenna for \$16.88, the normal price being \$20.98. So one was purchased and dismantled to reveal a seven slot armature $1\frac{1}{4}$ " diameter, sturdy looking brushgear with brushes sliding in proper brush holders and fitted with integral flexible connections and, best of all, a ceramic ring magnet $1\frac{1}{8}$ " OD, $1\frac{1}{16}$ " ID and $\frac{3}{4}$ " long. Fig.1 shows an antenna with these components alongside.

Having been earlier involved with modifications to some Sagami totally enclosed (can) motors, it was decided to make a not-quite-totally enclosed motor for an O gauge model. The motor was to have a large opening adjacent to each brush holder for inspection and servicing of the brushes and commutator. The case was to be from a piece of 2" OD steel tube (ex washing machine), and other material available included a piece of $2\frac{1}{4}$ " diameter aluminium bar, $\frac{3}{16}$ " diameter silver steel, a pair of $\frac{1}{2}$ " x $\frac{3}{16}$ " ballraces and an assortment of screws.

First the armature had to be modified. As shown in Fig.1, the original armature had a single ended shaft 10mm diameter with an integrally machined worm. This end was cut off $\frac{1}{16}$ " from the commutator and the other end was cut off the same distance from the windings. A scrap of metal bar about $\frac{1}{4}$ " larger in diameter than the armature was held in a three jaw chuck in the lathe and bored out to a nice sliding fit on the armature. Then, with the armature in this bush, the jaws were nipped a little tighter so that the armature was held securely and ran quite truly. An alternative, suitable for repeated use, is to mark the bush at No.1 jaw and then saw through the wall of the bush opposite the mark. Fig.2 shows a completed armature held in such a split bush.

With the armature so held, the end of the shaft was faced to clean up, centred and drilled a little over half the length of the shaft with a No.14 drill. The armature was then reversed in the bush and the facing, centering and drilling repeated. A $\frac{3}{16}$ " reamer was then passed completely through the shaft from both ends. This was also a good time to take a light truing cut over the surface of the commutator. After cleaning the hole of all oil and metal chips, a length of $\frac{3}{16}$ " silver steel was inserted and secured with Loctite (in the olden days soldering flux would have been used — that's right, good old Bakers!). Fig.3 shows an original armature and a modified one with the bearings fitted.

Two identical endplates and bearing retainers were made to the dimensions in Fig.4. The two $\frac{1}{8}$ " Whitworth holes and the two $\frac{5}{32}$ " holes were drilled in only one plate. The former two holes were actually located by spot drilling through the insulating plate to which the brush holders were attached. The latter two holes are for flexible leads to the brush holders.

The length of steel tube required was determined by measuring the distance between the flanges of the endplates when assembled with

As detailed by Chalmers Watt

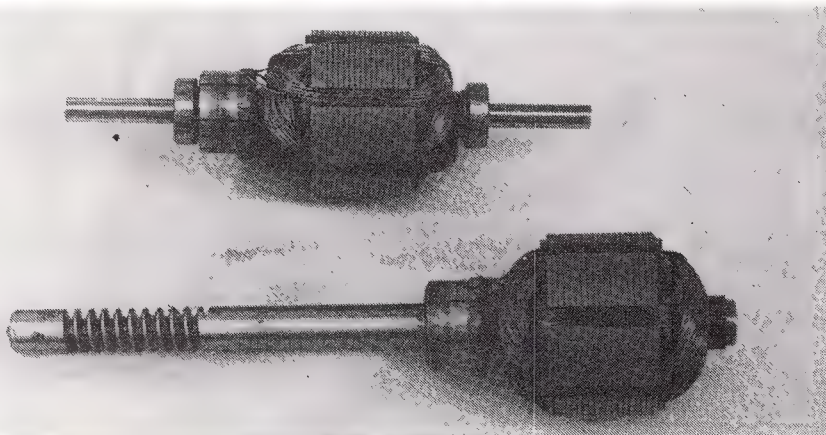
the armature and bearings. A piece of tube a little longer than required was then bored out in the lathe to a snug sliding fit on the magnet

and the two ends of the tube faced off to the required length. Four $\frac{3}{32}$ " holes were drilled equally spaced around each end of the tube and $\frac{1}{8}$ " from the end. These holes were used to spot drill matching holes in the endplates, the spotted holes being subsequently drilled

Fig.1

Fig.2

Fig.3



The magnet was then assembled in the tube, end location being by a loose ring that fits between the magnet and the non-brush endplate. The width of the ring was determined

the convention with ring magnets is for the manufacturer to provide a groove on an end face of the ring to indicate the position of one — probably the North — pole. The magnet was secured with a smear of epoxy adhesive.

The rest of the motor was then assembled, end location of the armature being achieved by adjustment of the length of the bosses of the bearing retaining plates. This form of construction was adopted to avoid the need for machine stepped holes for the bearings. The only changes made to the brushgear were to provide lighter brush springs and to intersperse a thin insulating plate between the brushgear and the endplate to avoid short circuits to the tabs of the brush holders.

When the magnet adhesive had set, and with the leads attached to the brush holders and brought out through the holes provided in the endplate, the motor was tested on 12 volts DC. Our standard torque test was then applied to the shaft with three results:

- (1) a slight reduction in speed;
- (2) a 100% increase in current; and
- (3) two burnt finger tips.

The currents noted were 0.6amp at no load and 1.3amp at finger burning load. Speed measuring facilities were not available. Since the writer and his immediate circle of friends use 24 volts DC, there is little doubt that a useful form of motor has been evolved.

The success of the NQTE motor suggested that an open frame version could be interesting to make and perhaps involve less work, besides not everyone has a piece of 2" tube or 2 1/4" aluminium bar available.

For the OF version, the endplates are $1\frac{1}{8}$ " square and four spacers or pillars were made from $\frac{5}{16}$ " square brass bar. The dimensions of these two items are shown in Fig.5. The spigot and stepped hole arrangement shown provides more accurate location than screws alone. The magnet is located endwise by a small flat filed on one corner of each spacer and, to prevent the magnet from rotating, a small grub screw is situated diagonally through two adjacent pillars. All other details are substantially as for the cylindrical motor. Fig.6 shows the open frame motor partly dismantled and Fig.7 shows the two motors.

During the testing of Motor No.2 on 24 volts, the need for slot wedges became apparent when a couple of turns of one coil were thrown out of their slot and were severed in the air gap between armature and magnet. Fortunately only one coil was damaged and, being the last wound on, was easily replaced. Slot wedges $\frac{3}{16}$ " wide were then cut from $\frac{1}{32}$ " bakelite sheet and one pushed into each slot to prevent recurrence of coil lifting. Also during this session it was suggested that the en-

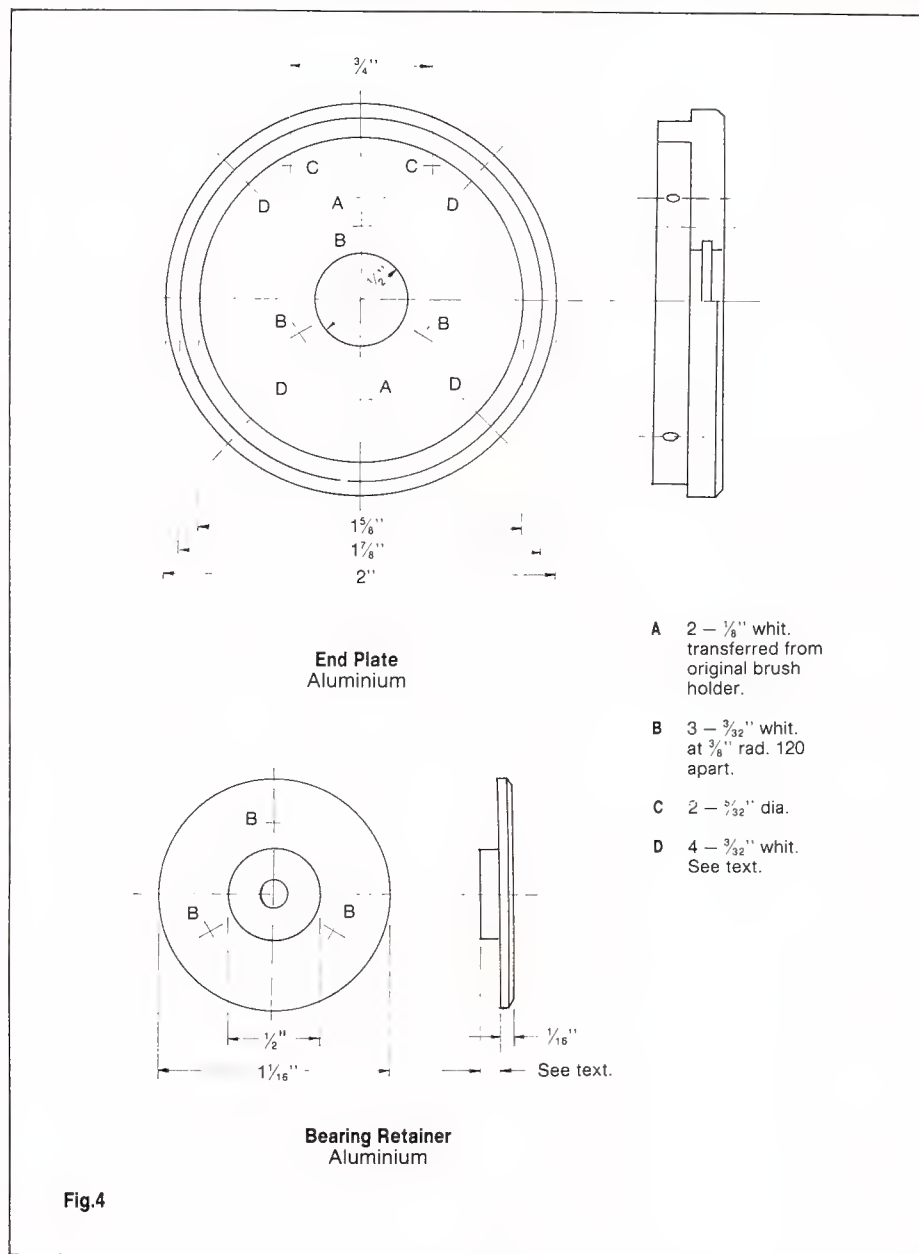
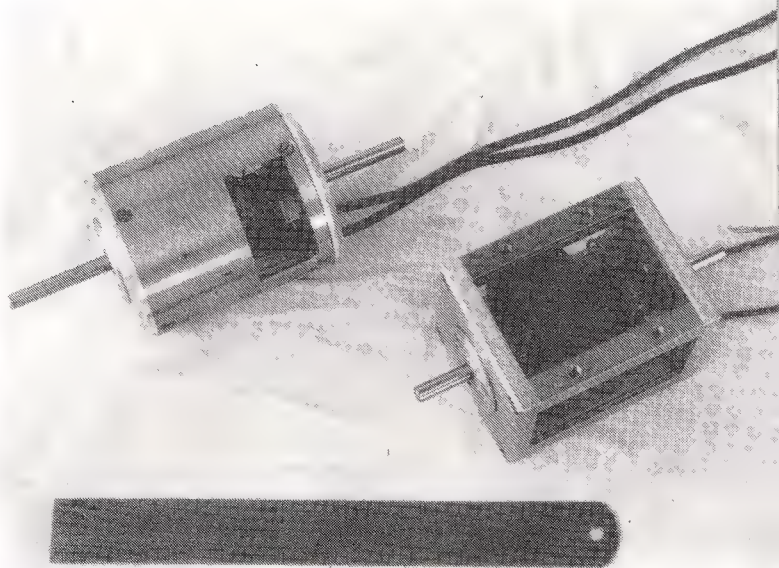
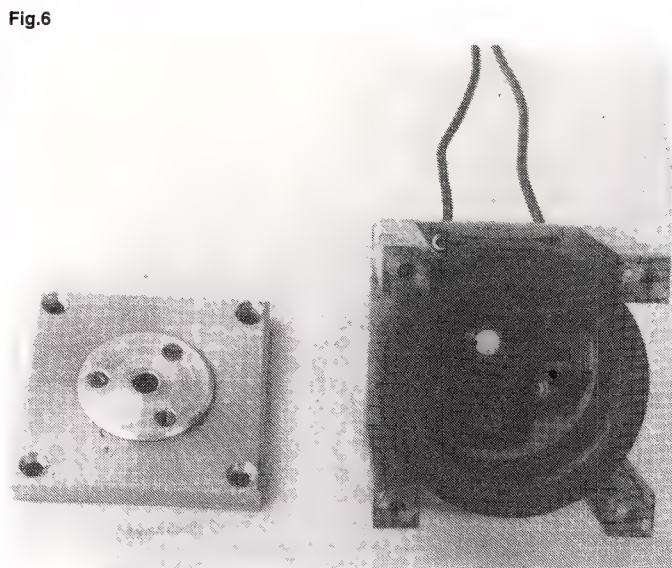


Fig.7



dplates could be cut down to the dotted lines on the drawing and two of the spacers eliminated. The magnet could be secured by a band of shim brass and a screw into each of the two pillars. This would result in a less bulky motor, although the OF motor in its present form will fit (just) into an O gauge Vicrail R Class tender. It will also probably fit into any full width electric or diesel locomotive model.

Other motors now being looked at include a tape cassette motor, made by Mitsubishi and marked by a chain of radio parts shops at \$4.00 each. When the magnetic shielding is stripped away, a motor $1\frac{1}{16}$ " diameter by $1\frac{1}{4}$ " long with a 2.5mm shaft $\frac{3}{16}$ " long is left. This motor has a ring magnet $1\frac{3}{8}$ " OD, $\frac{7}{8}$ " ID and $\frac{1}{2}$ " long. Another likely motor is that used in a bilge pump sold at boating suppliers for about \$17.00 each. This motor does not have a ring magnet, but has two ceramic block magnets, as do the Sagami motors referred to above. The dimensions of the motor are $1\frac{1}{16}$ " diameter, $2\frac{1}{4}$ " long with $\frac{5}{8}$ " of $\frac{1}{8}$ " diameter shaft at one end. A car vacuum cleaner selling for about \$15.00 appears to use the same motor.

So there they are, Ring Field Motors for O Gauge. At present, investigations are being made into the feasibility of making a NQTE motor bogie — for O gauge of course — using the ring magnet from the cassette motor.

But more about that next time; if the Editor considers that there can be a next time. ■

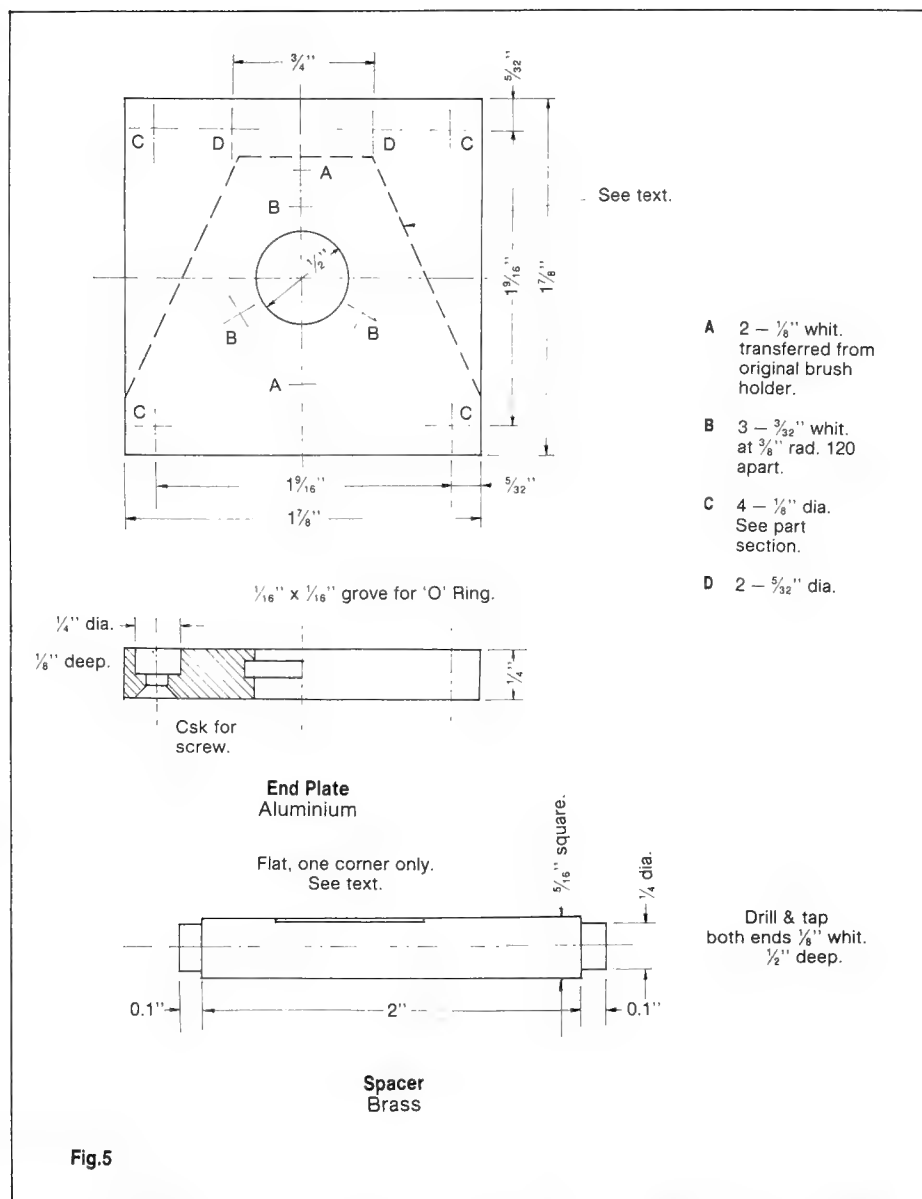
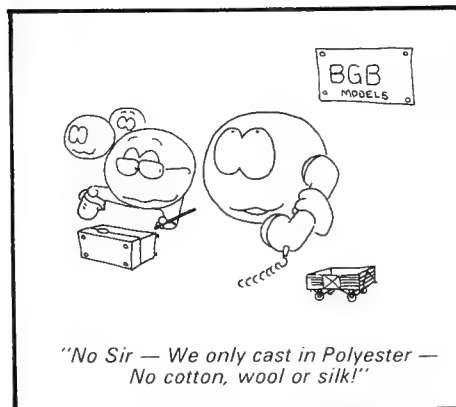


Fig.5

MAILBAG

Sir,

Whilst flicking through an old Hornby catalogue ('79 edition), I came across a photograph of a model of a BR 08 class diesel shunter. It looks remarkably like an F class shunting loco of the VR. With a little modification and repainting I believe a good model of an F class can be made. Although being in OO scale, it shouldn't be too overscale for an HO scale layout. Lima produce similar models in both HO and OO, although they are slightly different because they are based on later versions. These would need slightly more modification.

While on the subject of Lima models, could you please tell me the number of an edition of AMRM that features a Lima S class so I can order it from back issues.

Ronald Jerney,
Reservoir. 3073.

P.S. Congratulations on your 20 years in publication. Although I have been reading AMRM for only a short time, it has helped my modelling considerably.

The Lima S class was featured in the March/April 1981 issue of AMRM. The Roco HO scale 'Dutch Railways 0-6-0' shunter makes up into a very good scale model of the VR F class. An article on the conversion will be featured soon in AMRM. — Ed.

Sir,

In the last issue of the AMRM magazine, Jack Sinden wrote an article in which he mentioned the use of backdrops put out by Detail Associates. I have found out that they are an American company but that is about all. Since I am interested in purchasing backdrops, I would like to know more about

this company. Do I have to write to them in the USA? If so, where could I obtain their products? Any information relating to the obtaining of these backgrounds would be greatly appreciated.

M.J. Newell,
Kelvin Grove. 4059.

Here is one reason why ALL model railway suppliers should consider advertising in AMRM — Ed.

Sir,

Ron Cunningham, in his article on old wagons (p.52, Vol.10, No.8, April 1982), mentioned his 'discovery' of an old four wheel tank wagon at Orange and wondered if anyone could provide its history. Although Ron did not indicate any identification numbers still visible, I am 99.9% sure that the wagon in the photograph is one of five identical wagons sold to the NSWGR by Esso Australia Ltd in 1965.

Clyde Engineering Co. Ltd of Granville built ten 5990 gallon capacity four wheel tank wagons for Atlantic Union Oil Co. Ltd in June 1928 which were numbered 1-10 on the company's register and were issued with Dept. Nos. 7223-32 inclusive. They were painted silver with black chassis and had UNION Motor Spirit signs signwritten onto the tanks.

A photograph taken in 1950 shows a wagon with a curved enamelled metal sign attached with the word ATLANTIC in red on a white background. The tank and chassis are painted black.

The channel beam with the diagonal tie rods and the wire ropes across the tank were all fitted sometime after the 1950 photograph. In 1958 the tanks from five of these wagons (Nos. 2,3,7,9 and 10) were transferred to 26' bogie underframes constructed

by Tullochs at Rhodes. As from April 1962 the Atlantic signs would have been replaced with an Esso oval and the words 'Esso Australia Pty Ltd' when the company changed its trading name throughout Australia.

In May 1965 the five wagons (Nos. 1,4,5,6 and 8) which had not been converted to the bogie underframe were sold to the NSWGR. One of these tanks still fitted to its chassis but without wheels and W irons, springs etc. has been noted at Pippitta.

The remaining five tank wagons were finally retired from railway use in 1981 after 50 years of service but even then they were not finished. After removal from their chassis, they were transferred to Manildra where they are used for bulk storage of fuel.

So ends the history, to date, of these unusual oval shaped rivetted tank wagons.

H.G. Armstrong,
West Pennant Hills. 2120.

Sir,

As a fitter tradesman employed by the SRA of NSW at their Bathurst Locomotive Workshops (formerly Chullora Loco Works) and being a member of the Eighth Notch Photographs Group (who displayed at the last Showground exhibition), I would like to use this opportunity to add to a few points made in the review of the Casula Hobbies 80 class in brass.

These points apply to information on the real thing, not Casula Hobbies' excellent addition to the Australian modelling scene.

Point 1: The 80 class locomotives are painted in two basic colour schemes, i.e. 8001-8030 in original plain

scheme and 8031-8050 in reversal/yellow end schemes. But in addition to these two schemes, variation lies in a couple of areas which would affect a modeller with his/her 80 class.

On 8001-8030, the 'L7' logo is carried on the sides above the loco numbers. On 8031 and 8032 the 'L7' logo and numbers reversed positions. 8033-8050 carry the numbers in the same position as 8031 and 8032, but carry no 'L7' logo whatsoever. Now, on 8031-8033 the centre lining on the ends is thinner and of narrower angle in the 'vee' than that on 8034-8050.

So I suggest that, as in all modelling cases, you photograph the unit you wish to model as no two examples are the same.

Point 2: Only 8043 carries vents instead of windows at the compressor end (No.2 end) of the engine room.

Point 3: 80 class locomotives are allocated to two depots: 8001-8015 to Lithgow and 8016-8050 to Eveleigh. They are not restricted to Western Workings but work over all main lines and some selected branches.

The latest workings of 80 class now see a rostered passenger working on the Illawarra line in addition to their regular goods workings to Port Kembla and a stray working which occurred on 8/5/83 when 8021 worked a work train to Riverwood and return on the East Hills line.

Point 4: As regards the new corporate colour scheme, at the time of writing only locomotives on general overhaul at Bathurst, Cardiff, Chullora and Eveleigh Locomotive Workshops receive a repaint. Locomotives on top overhaul normally don't receive repainting — they are normally just touched up.

So with 80 class, only just at their first top overhaul at Chullora, and after two major collision repairs applied to 8011 and 8018, the first 80 class in the new colours will not appear till some time in 1985.

Anyway, just to keep yourself and your readers in the know, the following locomotives have been repainted in the new colours. I list them by class and order of re-entry to service or will soon be.

42 class: None — all to be withdrawn
421 class: 42101 due ex-Chullora, July 1983
422 class: 42215, 42214, 42218, 42208, 42210
44 class: 44100, 4424, 4403, 4492, 4460 (incidentally, the last MKI 44 class to be G/OH), 4499, 4496
442 class: 44240, 44238, 44237
45 class: 4504, 4516, 4506, 4503, 4515
46 class: 4609, 4607, 4610, 4639
47 class: All currently in storage but are expected to return after overhaul and modifications at Bathurst Loco Works in late 1983/1984
48 class: 48103, 48107, 48125, 4845, 48121, 4833, 48117, 48126, 4808, 48110, 48119, 4875, 48122, 4874, 48108
49 class: 4902, 4905, 4903, 4909
70 class: 7007 (late scheduled G/OH in class)
80 class: None till first G/OH approx. 1985
85 class: None till first G/OH
86 class: Standard in new colours
X100 class: None
X200 class: X203
DP class: 101

While I'm in the mood, I may as well write down Railcars repainted regardless of T/O, G/OH or Collision Repairs.

600/620, 660 class: 628/728, 632/732, 607/707, 670/770, 630/730, 635/735
PF/HPF class: 903, 951, 908, 957, 958, 909
DEB trailers: 853, 862, 801, 854, 856

I hope this information is of use to yourself and your readers and if our group can help to keep your magazine up to its present excellent standard, please don't hesitate to contact us.

Charlie Cox,
Narwee. 2209.

Further to the above notes, all 81 class locos presently being introduced to service are in the new livery as are all the 86 class electric units — Ed.

Also, there was a report that 8031 initially left the manufacturer in the original red and chrome yellow livery. It was however repainted to the reverse livery scheme before being put into service. Can any reader shed some light on this matter with photographic confirmation?

Sir,

In response to the letter from John Harding in the June issue of AMRM concerning locomotive liveries, the following may be of interest.

With reference to the 38 class, it is stated "so it is quite incorrect to paint a model non-streamlined 38 with an all black smokebox and plain cream lining". But what if the model is 3813?

This loco, after outshopping from Cardiff in 1967,

was painted with a black smokebox and lining similar to a streamlined 38 class, i.e. cream only lining was applied to the bottom only of the valance and one cream/yellow line ran from smokebox to cab in roughly the same position as 3801. Photos of the loco taken during the last months of steam working on the west June-July 1967 show this feature. Also many photos exist of green 38s with black smokeboxes and green or black cylinders. During the transition from green to black it was also possible to commonly see green engines/black tenders and vice versa. Photos in the 'Flyer' book show many variations in green 38 class.

Regarding the 32 class, I would disagree with Mr Harding and say it would be correct to paint a Berg's C32 in green provided it was 3306, 3374, 3300, 3239 or 3345 which were all painted green before 1934; the first rebuild (3306) was in April 1937. In fact, records show that 3306 and 3374 were the only locos reframed. There is a good photo of two green old framed 32 class in the NSWRTM's Roundhouse 125 special edition. Of interest in the photo are the 'hungry' boards on the tenders are painted black.

Whilst not a regular thing, 3616 and 3642 have worked a number of trains whilst painted green with Belpaire boilers so a model of 3616 or 3642 hauling a 'tour' train etc. on a layout would be OK. Also 3661-75 have spoked pony wheels, not 3671-75 as stated.

Similarly, 3526 has been seen in blue livery with valances etc. so a model of this as a tour engine would be OK as well.

There is also considerable photographic evidence to show that quite a number of passenger locos were lined in red in addition to 30 class tank locos.

In conclusion, I would like to point out that the best way to detail a model is to find a photo of a particular loco and duplicate that in model form. Whilst locos are supposedly all of the same class etc., there are many variations between individual members of a class. Even today, although supposedly painted to a set design, there are many and varied schemes existing in the diesel fleet. Knowing the railways, no doubt the same thing existed in the 'steam' days.

Bruce Freeman, 1 Sydney. 2000.

Sir,

I am moving to Australia (Sydney area) next year and would like to make contact with an Australian model railroader or two in the mean while. I model American narrow gauge in O scale. Would very much appreciate you giving me a name or two of any modeller in the area interested in American narrow gauge. Would like to correspond so that I better understand the modelling environment.

George Paxton,
California. USA.

If any modeller is interested, please write to SCMRA, PO Box 317, Epping. 2121 and your letter will be passed on to the USA. — Ed.

Sir,

I have recently constructed my first locomotive body, of Australian Iron and Steel 1012 HP diesel electric locomotive (featured in February 1983 AMRM). This was constructed from styrene. It was for me a test. Now I have an acceptable body, but no mechanism. I found that it was easy to do. All newcomers who haven't tried kitbashing or scratchbuilding, all I say is to try it. It is quite easy. (It took me all of 48 hours to build my model).

My next project will be limited as I draw a tight budget, but will be done. The first project will be a model of a Comalco Railways locomotive, which runs in Weipa. (To readers, I plan to write an article on Weipa railways, so do not miss it when it comes!). My second project will be to build a few Queensland railways bodies in HO3½. They will hopefully wait for a TT mechanism when my budget expands.

That's all on that. I now ask the more experienced modellers for advice. Can someone tell me how to fix my coaches, they keep coming off the track, at the least excuse! The coaches are Hornby's old Southern Aurora cars.

I hope one day in AMRM we get an article on itself, the behind the scenes shot so to speak. As I have effected my thought for the day I will thank AMRM for a tedious job which brings much fruit.

David Head,
Brisbane Boys College. 4066.

An article on AMRM has been in the preparation stage for some considerable time. Unfortunately every time it nears completion we successfully manage to change our production method, making the

article useless. We still plan to present it as time and space permits. — Ed.

Sir,

Still the greatest magazine of them all. You're improving with age. Getting better and better.

Jack Smith,
Corinella. 3984.

Sir,

I am an English railfan modelling modern outline Victorian Railways, who wishes to correspond with any Australian railfan with the view of exchanging model locos, rolling stock books, etc.

John Simmonds,
9 Beechmont Avenue,
Honwell. London W7.
England.

Sir,

Please advise if you have a back copy detailing dimensions etc of the V.R. six wheel Z van. Also would appreciate any advice for making model 'canvas tarpaulins' like those on V.R. two axle open wagons.

Peter Marsh,
Freshwater. 4872.

AMRM has yet to cover the V.R. Z van in detail. An article on building tarpaulins for open wagons can be found in the January/February 1980 issue.

Sir,

I was interested to read in the June issue of AMRM a letter from Garry Fallon of Ringwood outlining his intention to model Tasmanian Railways in HO3.

In his letter he mentioned that he has a quantity of N gauge equipment, and I wonder if he has considered the possibilities of modelling in Tn3½ (1:20 or 2.5mm to the foot) using the N gauge equipment.

I have been modelling QR for some years in this scale and have accumulated quite a variety of rolling stock, mostly scratchbuilt.

Most rolling stock is easy to model as much fine detail can be omitted, provided the proportions of the model are accurate.

An added bonus is the possibility of creating a more spacious scene within a given area to give that Australian 'feel' of open space.

Whatever his decision, I hope he enjoys many years of happy modelling.

Geoff Perkins,
Goodna. 4300.

Sir,

I am at present planning a small HO Sydney Western Suburbs terminus, using Roger Sheppard's article in issue 114 for a basic reference.

Before I start scratchbuilding are there any HO kits of single deck stock available now?

I also need to know the height between the top of the rail and the roof of a double deck car, as space reasons have left 15 feet the maximum with a decent pantograph.

E.Riddler,
Ermington. 2115.

Although Friedmont have produced a number of electric car kits, at present there is no kit on the market for the single deck suburban car. Details of Sydney suburban cars can be gleaned from outline drawings of the stock which are obtainable from The Railway Shop, Pitt Street, Railway Square, Sydney.

Sir,

I read with interest M. Bruce Norton's letter in AMRM August, 1983 edition fossicking for information from readers as to whether the new S.R.A. 81 Class GM diesel in the form of 8101 once graced the yellow reverse colour scheme.

From the tenor of Mr. Norton's letter I get the impression that his ponderings may well be the same as my own and I think that I will be sharing with him the more than likely disappointing confirmation that the class leader of the 81 Class was never by design or accident adorned in either a sensible or acceptable colour scheme. To wit I much preferred myself the original splendid livery of the 422 Class GM machine before the introduction of the reverse colour scheme.

All the same, when and if I am able to acquire a well produced detailed brass model of the 81 Class at sometime in the future and I hope to, I absolutely refuse to desecrate an expensive pleasing model by

Continued on page 48.

BV First Class passenger car kit, in HO scale, by T.C. Rail Models. Available from Casula Hobbies, Phoenix Plaza, Macquarie St., Liverpool. 2170. Price: \$21.00

The two NCR sets of cars formed the only coupled sets of this type of car on the NSW system. They were converted from MCX and MFX cars in 1939 for use on the Newcastle Flyer services. At that time they had matchboard sides and crownlights and were painted red and cream. Each set was made up of a BV, HCV, RFV and HFV and numbered as sets 77 and 78. They were ultimately replaced by air conditioned sets and eventually finished up on the Goulburn day train. In 1964 the cars were converted to smooth-sided, non-crownlighted vehicles.

In the mid 1970s the sets were broken up and most cars converted to supplementary interurbans. Two were destroyed in the Granville disaster in 1977. The years have seen further demise, with the only car remaining intact being BV485.

On the whole, the NCR set cars must surely be the least photographed vehicles of all, and researching them for modelling purposes is extremely difficult. Like other 72'6" cars, some had four bar underframes, whilst others had two.

The kit under review represents BV931 ex set 77 before breakup, or IFV931 simply by frosting over certain windows.

This is a body kit only and the modeller must supply his own bogies, either Prototype/PMH 3AG or Lima's ones. The components of the kit come in a cardboard box, are of epoxy and comprise 2 sides, 2 ends, 1 main roof section, 2 curved roof ends, 3 floor sections (the centrepiece with underbody detail cast on), interior compartments and torpedo roof vents. The sides are wrapped in plastic bubble foil for protection. Turned brass buffers, wire for truss rods, etc., plus a piece of Plastruct tubing for the water tank make up the non-epoxy parts. A two page set of instructions and roof vent layout details complete the kit. Recommended adhesive is Superglue for initial tacking, followed by epoxy glue for long term bonding.

Like other passenger car kits from this manufacturer, the modeller must first remove the epoxy film from the glass windows, after which assembly is straightforward. The roof section may have to be shortened slightly and then any gaps filled with a contour putty (e.g. Selseys Panel Metal).

I found all castings to be nice and clean, with all windows and doors in their relative positions. All general dimensions seem within accepted tolerances. The model accurately portrays the BV as we last remembered it.

The manufacturer states that the BV and HFV will be available separately for adaption to IFVs, but otherwise the cars will only be available as the 'NCR' set in four car blocks.

Allan Brown

1984 calendar by the New South Wales Rail Transport Museum, P.O. Box 31, Burwood. 2134. Price: t.b.a.

I was fortunate in having been able to view, at short notice, the printers' proof sheets of the full colour 1984 calendar, due for release around mid-September. I was very impressed.

The calendar will be to established size and format, but will include the dates of steam operating days at Thirlmere.

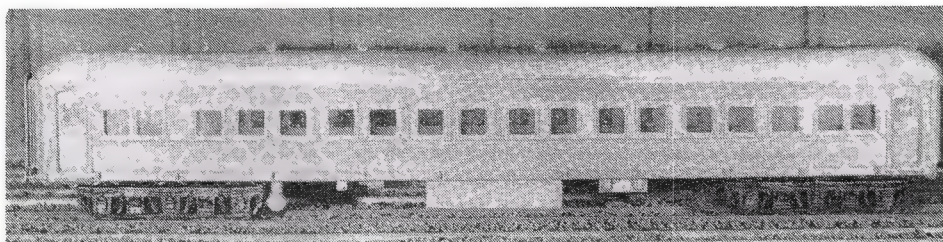
So far as the photographs are concerned they are all excellent. The full sized cover shot is of black 3802 on a fast stock train near Exeter in 1964. The back cover shot is a night scene of 1243 and 3214 shadowed in the lights from the Museum's loco shed. Careful artwork will allow for both these shots to be retrieved for possible framing.

The general month by month pages show various steam workings throughout the state (NSW), even down to the ubiquitous 19 class working the Boral Matraville siding with Bunnerong Power Station in the background.

There are four diesel shots, ranging from 42 class, 44 class (with a candy stripe car in the consist), a 5 unit CPH lashup, and culminating in a fine scene showing South Australian Railways' 603, on hire to the SPA, hauling an empty limestone train up Exeter bank in 1982.

The problem of shadowy fronts on locos (a problem on last year's calendar) has largely been corrected this year, making the 1984 calendar once again a top rate production.

Allan Brown.



BV coach by T.C. Rail Models. The kit has been structurally assembled only and has yet to be detailed and painted.

Stripwood by Northeastern Scale Models. Available from McBees Hobby Centre, PO Box 144, Coburg. 3058. Price: \$3.00 per pack.

Northeastern stripwood has been around for many years, in fact Northeastern was established in 1946. However a new method of marketing presents an opportunity to once again inspect the product.

Milled from fine grained bass wood the timber shapes in the Northeastern range represent the many shapes in use in the building industry. Strips, squares, rectangles, angles, 'I' 'T' 'H' & 'Z' sections, channels, columns, etc., the range is endless. The shapes are supplied in a very wide range, so that every scale is provided for, in one way or another.

The timber shapes are now marketed in 11" (280mm) lengths packed inside a stout, card backed cellophane pack. The basic price of a pack is \$3.00 and the number of sections inside each pack relates to the size (thickness) and the shape of the section. The more exotic the shape to manufacture the lower the quantity in the pack.

The stripwood, being of fine grain is a very easy material to work with. Generally the shapes are free of any imperfections although some fuzz can be found occasionally. This can be readily cleaned off with fine 'wet and dry' paper or a very fine file. The shapes can be cut with a very sharp blade or with a fine toothed blade. There are some tools on the market that provide for easy and accurate cutting of timber.

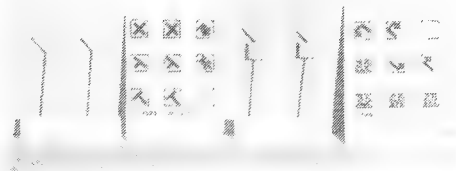
The timber is best secured in place with a PVA glue, Adquahere being the most noted in this field for it dries clear. It is possible however to use many of the ACC super glues to secure the timber to timber and other materials.

For some tasks there is no better material than timber. It is easy to paint/stain, easy to work and easily repaired. The provision of the Northeastern timber in the small packs will make it easier to use and store. The old days of fighting with 22" lengths of fine timber, often breaking the individual pieces is over.

Bob Gallagher.

Australian Road Signs in HO scale by Christine Hicks, PO Box 35, Fairy Meadow, 2519. Price: \$2.95

Christine Hicks have released a few more of the road signs, as listed below.



1203 — Junction Warning Signs.

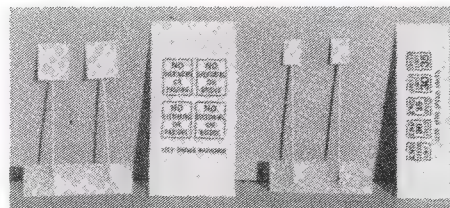
Supplied in a poly bag the two preformed sign posts are accompanied by an instruction sheet. The 8mm x 8mm diamond shape is fixed to the top of a 35mm long 0.8mm dia. post. Both are painted matt yellow. The signs are printed black on yellow paper, there being eight usable signs — crossroads, T junctions and railway crossings. Print definition on the solid is good but fuzzy on fine linework. The signs are on sticky back paper, which is readily cut with either blade or scissors. It sticks readily to the painted surface of the metal shape.

1202 — Curve Warning Signs.

Supplied in a poly bag with assembly instructions the two pre-formed and assembled posts are painted and ready for detailing and fixing on the layout. Each 0.8mm post had a 8mm x 8mm diamond fixed to the top with a 7mm x 5mm rectangle below. Both are securely fixed in place and painted yellow. The signs provided include sharp hairpin and rightangle bends, in both left and right hand direc-

tions. Speed signs for 25 and 35 mph are also provided.

The signs are printed black on yellow and while the solid print is well produced the lettering on the speed signs leaves a little to be desired. The signs have to be cut from the paper and the backing removed allowing fixture to the backing plate. The poor printing can be camouflaged with some heavy weathering. Packs 1203 and 1202 are supplied with the same installation directions as those reviewed last issue. While details indicate how to fit and adjust the height of the poles there is no mention of the hole size that must be drilled, it being a No.59 or 0.8mm size.



1206 — MPH Speed Signs.

Packaged in the poly bag there are two signs which comprise a 5mm x 7mm plate attached to the top of a 35mm high, 0.8mm dia post. Both are painted matt white. The signs for the plate are supplied on sticky backed paper. Fixture is simple; cut out the sign and stick it onto the plate. The signs are printed black on white. Line definition is very good, the numerals and lettering being the same style used 'in the old days'. The black outline of the sign even has rounded corners. Signs supplied include: End Speed Limit, End 30 Speed, Speed Limit 30 and Speed Limit 35.

The instructions that accompany the package are a new style for the manufacturer and not only includes assembly details (including drill size), but also includes the relevant details to the signs, specifying where, when and how the signs should be used, including the period the signs were used. A fine addition for the steam and early diesel era.

1207 — Bridge Overtaking Signs.

These signs are designed for use as a warning for motorists when negotiating a narrow bridge. The assembly sheet which accompanies the poly packaged signs details full usage and application methods. The posts have a 9mm x 11mm plate fixed to the top and four signs supplied as black printing on white sticky back paper. The sign specifies 'No Overtaking On Bridge' and letter definition is very good. Another fine addition to the range of road signs.

Bob Gallagher.

NSWR D50 class 2-8-0 locomotive in HO scale by Samhonga. Available from Mansfield Hobbies, 100 Pacific Highway, Waitara. 2077. Price: \$415.00

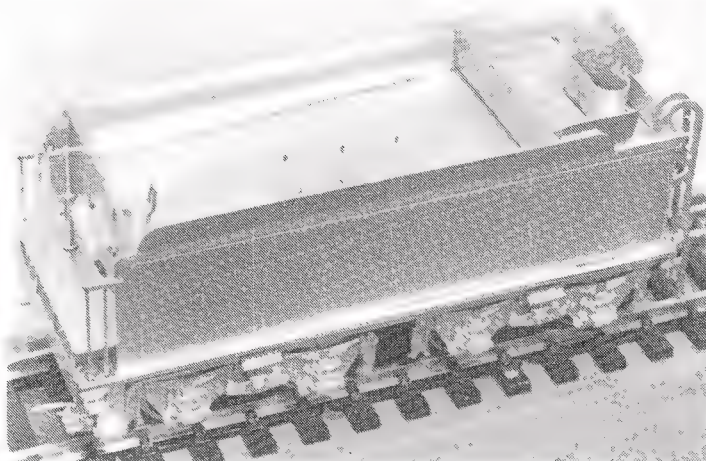
The D50 class entered service for the then NSWGR in 1896 as the Class T(524). Beyer Peacock built the first five of what was to be the most numerous class in the system. In all 280 were built by various builders over 16 years. All locos retained the 'Beyer Peacock' appearance which became a distinctive style for the NSWGR.

As initially introduced they were fitted with Belpaire (firebox) boilers, Allan straight link valve gear and saturated boilers. In 1911 Beyer Peacock supplied T(938) with a superheated boiler and after trials, superheating was adopted. The T class was initially supplied with a standard bogie tender which underwent some modifications before being replaced (in most instances) by the standard turret tender.

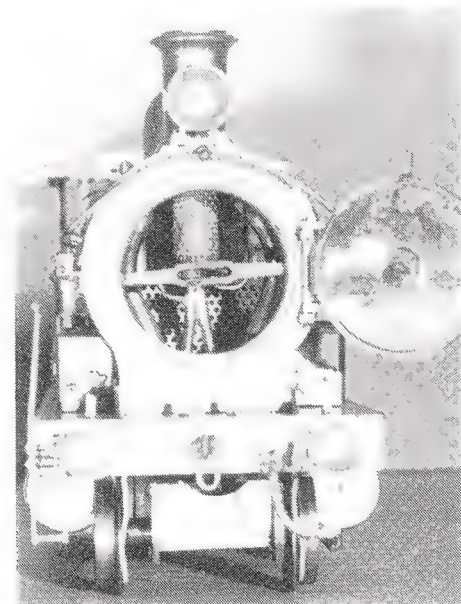
In 1924 all NSWGR locomotives were reclassified, the T(524) class receiving the D50 classification. The class was numbered 5001 to 5280. They were



Mansfield D50 — loco cab and tender coal plate detail.



Mansfield D50 — tender detail. Note the hinged lids and the racks for the fire irons.



Mansfield D50 — inside the smokebox.



Mansfield D50 — fireman's side.



Mansfield D50 — driver's side.



Mansfield D50 — loco front and tender rear.

painted in an all over black livery with red buffer beams. The class numbers on the cab side were brass while the numbers on the tender rear and front buffer beam were white. The class was used as a general goods engine and ran almost all over the NSWGR system.

The model represents a superheated D50, as seen in the latter days of steam, while the tender is a standard Beyer Peacock tender with extended sides. It was made in Korea by Samhongsu to the specifications set out by Mansfield Hobbies.

The model has been fabricated from brass etchings, stampings and castings. A can motor drives the stainless steel tyred drives via a floating gearbox on the rear axle. All driving axles are sprung as is the front pony truck. All drivers are the correct gauge but the front pony and tender wheels were slightly in gauge. The tender wheels are spoked while the pony wheels are disc with four holes.

The model is a good representation of the prototype, all major (and most minor) dimensions being very close to dead accurate. All detail items are correctly positioned and the model appears to lack nothing. Whistle cord, washout plugs, ashpan base, injectors, etc. and the drive motion is also of scale thickness.

The cab is fully detailed, the backplate containing all relevant components correctly positioned. The tender is likewise well made and detailed, being fitted with a Kadee No.5 coupler pocket and a speaker mount.

The feature of this model is the opening

smokebox door, hinged lids and hinged coal chute door. The inside of the smokebox is detailed with tube plate, superheaters and spark arrestor. Access to open the door is via the smokebox door handle which has to be turned slightly for opening or closing. The door is not too closely fitted to impede the opening action if the model is painted.

On the tender, the tool box and water hatch lids open easily as does the coal chute doors. The buffers on both loco and tender are sprung while the tender bogies are equalised.

On the track the model performs very well. It has a top speed of 148 kph (93 mph), a low speed of 6.66 kph (4.16 mph) and a drawbar pull of 35 grams. The drive action is very smooth except when the crossheads fall free of the slidebars. The slidebars are not fixed to the holding bracket and when the crosshead falls free the loco attains a jerky motion. The loco was quite at ease hauling 6 Lima twelve wheelers up a 1 in 30 grade while on the flat it could handle 10 cars. All cars are fitted with the Casula brass wheelsets. The hauling ability of the loco can be considered as reasonable and it would be difficult to add extra weight, as detailing takes up any spare space in the boiler.

There is little doubt that this is possibly the most highly detailed and accurately scaled HO scale model made for the Australian market. This is the highpoint of the model, and unfortunately it is also its lowpoint. The detail is so fine and accurate that it is readily broken, bent or twisted and as previously mentioned the running qualities are also impaired. A further problem is the awkwardness of disassembly. Fortunately a detailed diagram is supplied to guide the model though the process of taking the model apart.

Despite this demerit it is a superb model and as long as it is carefully handled and maintained it will be a very useful addition to the modelling scene.

Bob Gallagher.

Australian National 'VFX' louvre van kit in HO scale by Broad Gauge Bodies, P.O. Box 137, Daw Park, 5041. Price: \$16.20

The 'VFX' ('ABFX' — 1980 code) is a 75' van that was introduced to traffic in 1971. A total of 110 vans were built and were numbered in two groups, 2443-2512 and 2648-2687. They were delivered over a 2-3 year period. They are used to carry bulky items with a low mass weight, including electrical appliances and tyres. They are equipped for bogie exchange and as such are found in most states.

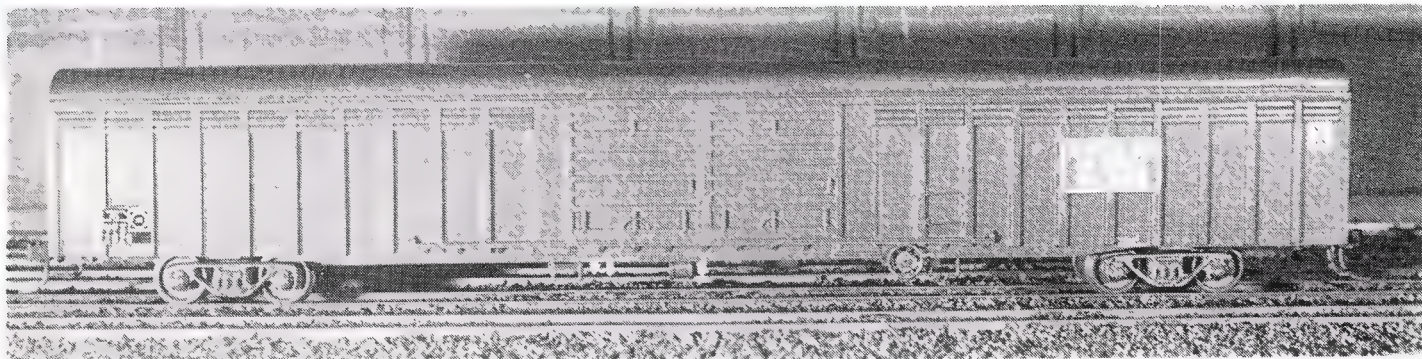
Initially the vans were painted Comrails red, but now are being painted into the Australian National green and yellow livery.

This is kit BK34 in the B.G.B. range. The kit represents the van in the latest style. The kit comprises polyester castings for the sides, ends, roof, floor and bulkhead panels. Wire is supplied for grab irons and brake detail, while a section of styrene sheet has been supplied for the A.N. emblem plate. A set of decals and a detailed instruction sheet makes up the kit, which was packaged in a poly bag.

The instruction sheet includes a good photo of an Australian National Railways 'VFX', prototype notes, assembly instructions and decal application details. All are of great benefit to the kit assembler. However the uninformed modeller may become confused with the correct code/owner of the van. The kit is labelled 'Australian National — VFX', the photo is of an 'Australian National Railways — VFX', the instructions refer to the 'Comrails red' livery, the decals are for a 'A.N.R.' VFX or ABFX while the instructions for the logo size refers to 'A.N.R and Commonwealth Railways'!

This lack of consistency belies the overall accuracy and authenticity of the kit and information supplied. While it is acknowledged that all aspects raised are for the same van in the same system, the use of one coding style throughout, would be less confusing, and a true indication is a very fine kit.

As supplied the very long (over 260mm) parts are well wrapped, free of casting defects, straight and are not sticky. The detail presented has been produced to a high standard and includes door latches and hinges, door runners and shunters



A.N.R. 'VFX' box car by Broad Gauge Bodies.

steps, while the roof detail includes the joins in the roofing material. Wire has been cast into the shunters steps for added strength — a very good idea. Underfloor detail includes centre sills, gussets, bolsters and brake cylinders.

Following the instructions, the kit went together rather easily except for the roof which would not remain flat after the prescribed heat treatment. Following the assembly instructions the manufacturer was contacted and a new roof section, which responded to the heat treatment, was supplied. The roof had to be shortened and secured in place.

The coupler pocket was the correct height and size for Kadee No.5s and the main centre sill had to be modified to allow adequate bogie swing around tight curves. The van was painted with Scalecoat Red Oxide and the decals applied. Athearn hopper wheels were used for the hand brake wheels.

The completed kit makes up into a very fine model of above average detail and appearance. It is a long van, and as such, ideal for large layouts and the modern diesel era.

Bob Gallagher and Graham Ball.

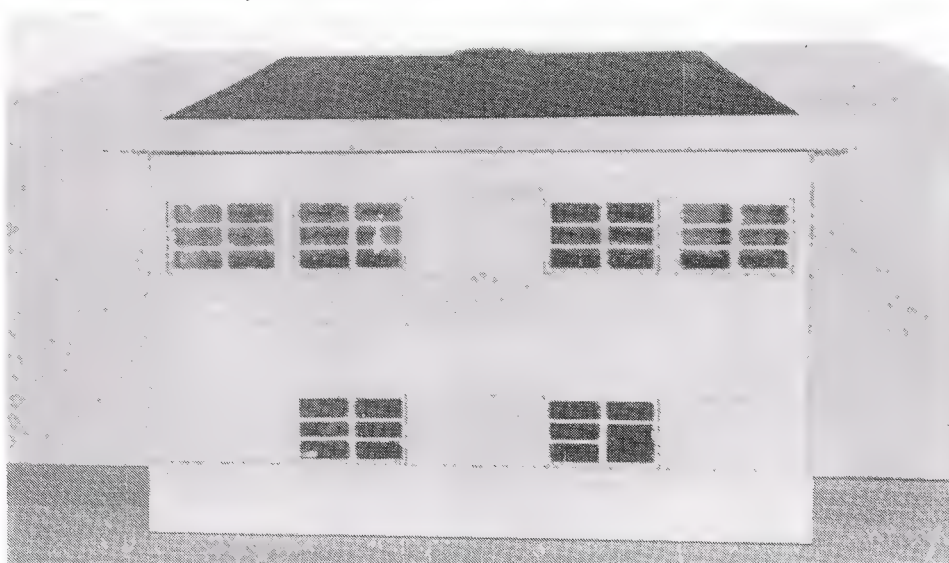
N.S.W.R. Signal Box kit in HO scale by Rails North Models. Available from Casula Hobbies, Phoenix Plaza, Macquarie Street, Liverpool. 2170. Price: \$16.95.

At long last a typical N.S.W. signal box has been produced. It is supplied in a clear plastic bag with a cardboard top. The kit comprised 5 epoxy castings — four walls and a roof, wire for downpipes and an instruction sheet. All detail i.e. window and doorway features have been cast onto the sides. The detail is very crisp.

The kit was assembled as per the instruction sheet and was very easy except for one thing. On one side of the kit, the glass cast into the side to represent the window glazing encroached into the recess for the corner. The glass could not be cut so filing the adjoining side was the only alternative. The finished joint was not pleasing.

Other than this small production fault the kit was easy and quick to assemble. One word of warning, there are 103 panes of glass to scrape a thin layer of epoxy off (to reveal the glazing) and it has to be done with almost infinite care and patience. Despite all the care a number of mullions (sections between the window panes) broke away and had to be replaced with 10 thou. styrene strip and super glue.

The instruction sheet includes four photographs of Grafton signal box. Although these photos are only Xerox type copies they can be used to detail



Grafton Signalbox by Rails North Models.

the model. Details shown on the photos indicate that Grafton Signal Box is adjacent to a platform, which explains why the door on the model is 4'6" from ground level. A modeller using this model would need to construct a platform or stairs to provide access for the model signalmen.

If care is taken when removing the epoxy flash from the windows and again when painting the windows a very good model of a N.S.W.R. signal box will result.

Ian Thorpe.

Four-wheel covered vans in OO scale by Hornby.

The four-wheel covered vehicle has been a typical part of the British railway scene for many years. Hornby have produced models of such vehicles for some time but with a view to expanding their appeal to the younger generation a number of 'fun' vans have been produced.

These covered vans have liveries and lettering which are genuine to the firms concerned but are not to be seen on the prototype. Three such models have been seen to date, being Baxters (meat products) in blue, Wimpy (the hamburger chain) in red and Callard & Bowser (butterscotch) in white.

The models feature the new split chassis arrangement which allows the brake shoes to be in line with the wheels. The bodies are spray painted and there are several printing operations which create attractive and colourful wagons.

It will be interesting to see how popular these models become as the younger generation will quite possibly have never known the vehicle in real life but will be quite familiar with the advertising.

Graham Ahern

0-4-0 steam locomotives in OO scale by Hornby.

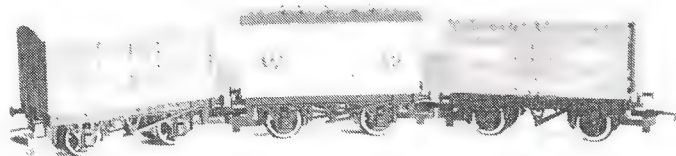
Hornby are releasing a number of items this year with the children's market very much in mind. The small 0-4-0 steam locomotives in the Hornby range will appear in a variety of liveries, mostly brightly coloured, with names generally intended to appeal to children.

The side tank locomotives are 'Northern Nellie' in blue, 'Southern Connie' in yellow and 'Terry' in orange.

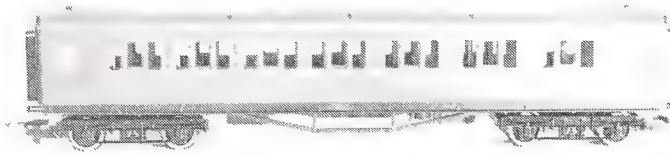
The saddle tank locomotives are 'Smokey Joe' in black and 'Stewart & Lloyds' in maroon.

The models have obviously been produced to a

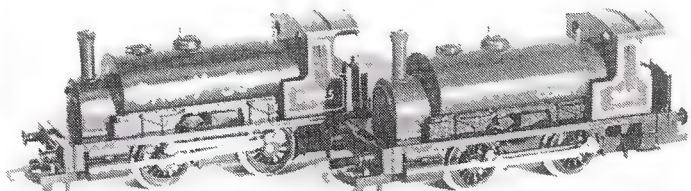
Continued on page 48.



Hornby OO scale four wheel covered vans.



Southern Railways passenger carriage in OO scale by Hornby.



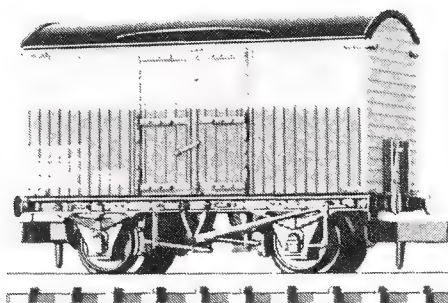
'Smokey Joe' and 'Stewarts & Lloyds Cornby', 0-4-0 saddle tank locomotives in OO scale by Hornby.



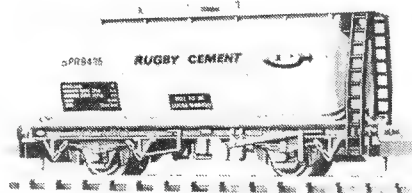
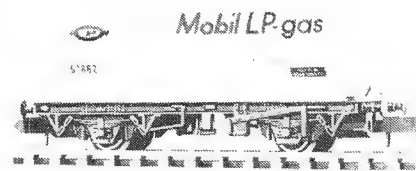
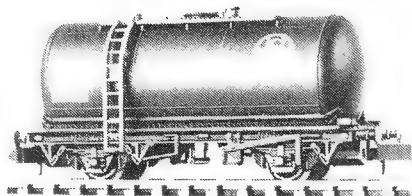
0-4-0 tank locomotives in OO scale by Hornby. From left to right 'Northern Nellie', 'Terry' and 'Southern Connie'.

PREVIEW

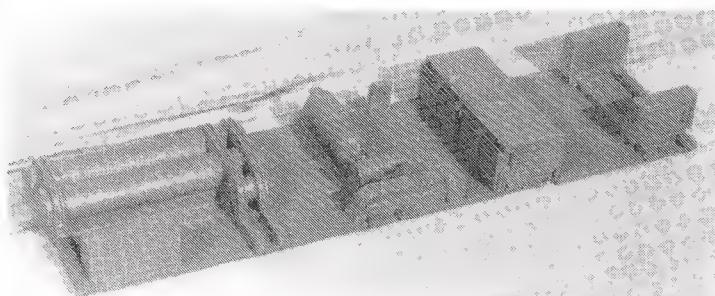
A Window Shop Preview of New Products released by the Model Railway Industry.



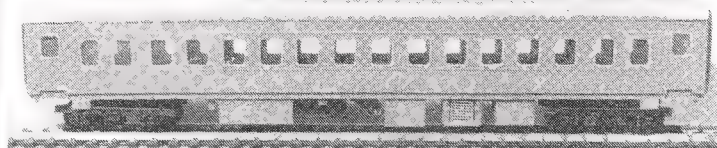
This British N scale standard box wagon is a recent release from Peco. The Railfreight livery is red and grey with white lettering.



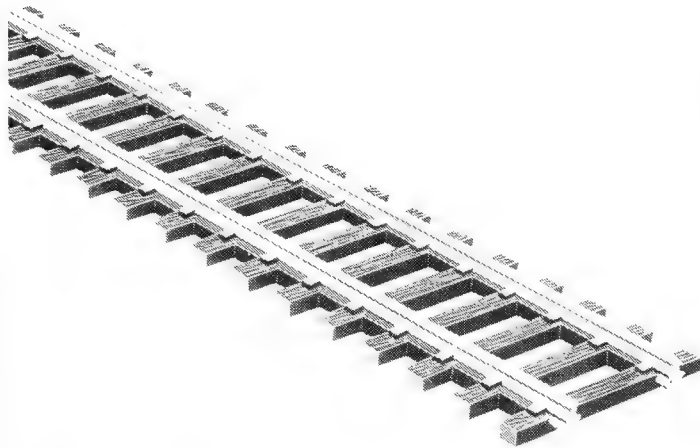
Peco have released (in the U.K.) these four modern tankers in British N scale. The ICI caustic soda tank is dark grey with white lettering, orange solebar and ladder. The Mobil LP gas tanker is white with red/blue/yellow lettering and decoration. The Rugby Cement tanker is silver grey with red/black/white lettering and decoration. The Albright & Wilson Ltd Phosphoric Acid tanker is blue with brown/black/white lettering and decoration. The tankers are ideal for the modern image modeller.



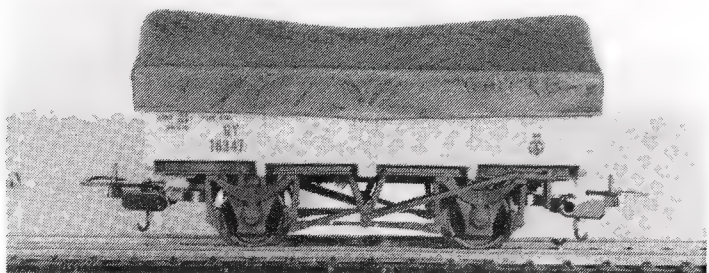
Main West Models have released an underbody detailing kit for the Lima Southern Aurora cars. They are available in packs of three (\$10) or separately (\$3.75) from Casula Hobbies. A detailed review will be presented in a future issue.



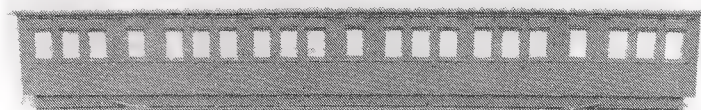
Rails North Models have released a 'HUB' car set, the FH is photographed above. The seven car set retails at \$149.50 and is available to order from Casula Hobbies. Included in the set is HFH, FH, RBH, BH x 2, RFH and PFH. A detailed review of the set, particularly the FH car will be presented in a future issue.



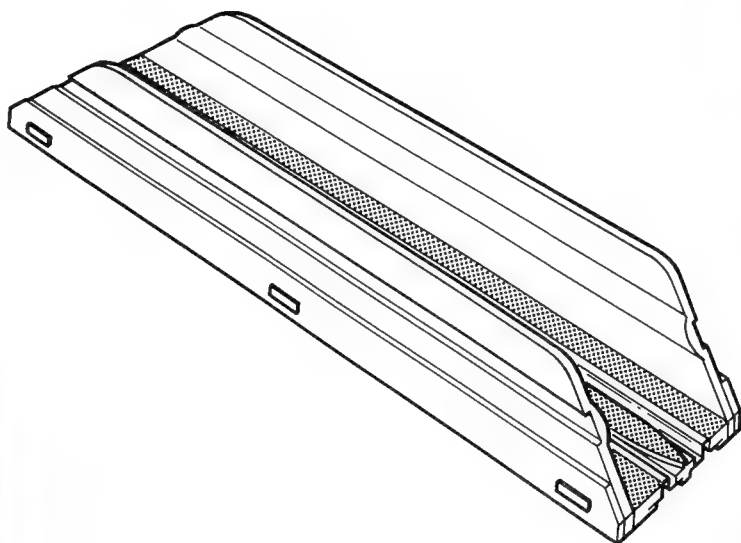
Peco have developed a fine scale track for British N scale. the visible rail height is only 50 thou. compared with the standard 80 thou. It can be matched with the standard rail, the special feature being the double base rail section.



Lima have released the HO scale VicRail 'GY' wagon, complete with tarpaulin. Reviewed in the June 1983 issue, the production models are identical to the reviewed sample except that the yellow colour is 'more solid' and the lettering sharper. The wagons is sold as a separate item (\$6.25) or in a three pack (\$17.25). The use of a three pack is a first in marketing for Lima.



Main West Models 'BX' dog box style passenger car kit, released recently. The kit sells for \$14.95, is available from Casula Hobbies and will be reviewed in detail in a future issue.



Peco have developed the 'Loco Lift' to cater for the modellers who use fiddle yards and have to lift the locos by hand to turn them. The 'Loco Lift' is fitted up against the end of the track and the loco (uncoupled from the train) run onto it. Via the plastic side, the loco and lift is lifted, turned and put back to the track. The lift is energised from the track.

Continued from page 45.

only be purchased from some hobby shops and Eastern Division, SCMRA, PO Box 317, Epping 2121 for \$5.50 plus postage.

A.R.R.D.O.

The Australian Transport Advisory Council, which comprises those Commonwealth, State and Territorial Ministers with responsibility for transport matters, decided in March 1977 to form the Australian Railway Research and Development Organisation, for the investigation of financial and management problems facing the Australian Government Railway Systems. A.R.R.D.O. was subsequently established as a private company in Victoria to undertake studies and research aimed at the generation of effective development plans for those systems, investigate how their financial situations could be improved (in relation to both their commercial and non-commercial roles) and examine how rail services can be made better through both investment and non-investment measures.

A brochure outlining A.R.R.D.O.'s structure, objectives and activities has recently been published. In it, specific reference is made to the major document so far produced, the '1981 Report on Rail'. The leaflet may be obtained by writing to the Executive Director, Australian Railway Research and Development Organisation, 576-578 Lonsdale Street, Melbourne, Victoria 3000.

New Publications.

The following publications have become available recently.

Railway Freight Wagons of New South Wales by John Beckhaus — \$9.95. This book presents the author's view of the SRA of NSW rolling stock fleet. Ideal for the present day wagon spotter and the modellers who plan to model from 1983 onward. A full review of this book will be included in a future issue of AMRM.

Locomotives in China by Peter Clark — \$9.95. A coverage of the steam locos in the People's Republic of China. A review of this book will be included in a future issue of AMRM.

The Last Great Air Race by Robin Bromby — \$4.95. Covering the air race between London and Christchurch (NZ) held in October 1953.

N.S.W.G.R. in Steam by Ron Preston — \$14.95 is back in print. This fantastic photographic pictorial can be used as an ideas book for the modeller looking for atmosphere.

ARHS Christmas Cards by Graham Cotterall — \$4.50 are still available and are fine representations of the NSW railway system.

Buses and Trams of Australia's Government and Municipal Operators by I.A. Lynas — \$7.95. Details of liveries, depots and locations along with 60 photographs.

The Observer's Book of Steam Locomotives of Australia — \$5.95. Hard covered, small format covering all Australian rail systems.

Prices of Thames by Bob Stott — \$8.50. A coverage of A. & G. Price Ltd, who built mining and timber milling equipment which helped to pioneer New Zealand industry before the turn of the century. Since then Prices have built many locomotives both steam and diesel for the NZR and private industry.

Unimat Lathe Projects — an Official Emco Unimat publications. An 88 pp book outlining ten

projects where the operation and uses of the tool are discussed in detail.

Australasia — a Reality?

Heard on the radio last weekend that once again there is a suggestion that New Zealand join Australia, this time as two separate states. If this does eventuate, those of us who like NZR as a prototype system will be able to boast "Well I am modelling Australasian".

On the positive side, modelling wise, the introduction of the Kiwis to the local scene will teach us how to utilise our resources far better than we do at present. They too, hopefully, may inject us dormant Australians with their affection for conventions.

Conventions.

While on the subject of conventions it is disappointing to report that the Port Phillip Convention, due to be held in Melbourne in June, was cancelled at the last minute due to the lack of patronage. No doubt it was a great disappointment to the organising body. It is hard to analyse why Australians are not keen on conventions, for they are good fun, and much can be learnt from fellow modellers at the various discussion groups.

It is pleasing, however, to report that those who travelled from New Zealand for the convention were not disappointed. The convention organiser spent the weekend with the Kiwis showing them around Melbourne and taking them to the many fine home layouts.

New Zealand Convention.

The New Zealand Model Railway Guild will be presenting their Bi-Annual Convention next year. The 1984 Great Waikata Convention will be held in Hamilton (North Island — just down from Auckland) over Easter — April 20-23, 1984. The venue is the Te Rapa Racecourse. The program includes activities for both modellers and their ladies. Railway wise, Hamilton is adjacent to Te Rapa marshalling yards, the largest rail terminal in New Zealand, and it is on the main North Trunk. So there should be plenty of rail action in large and small scale.

Details of the convention can be obtained from P.O. Box 10318, Te Rapa, New Zealand.

COMMERCIAL NEWS

Arrivals.

Confirming from last issue, the Mansfield D50 and the BGM A² brass locomotives from Samhongsu in Korea arrived and immediately sold out.

Camco Models have advised that their 'G' wagon was delayed a little but should be on sale before this issue is published.

The Lima 'GY' four wheel open wagon arrived in early July.

Craftsman Models have released a range of paints designed to cater for the need of NSW modellers. The paint is a gloss enamel and being fast drying is for use with a spray gun/air brush. Colours available at present include Etch Black, Indian red, Tuscan, Roof Brown and Passenger Red. The paint is marketed in 30ml bottles which have a Badger compatible screw top. Price per bottle is \$2.25.

Main West Models have released an underbody detailing kit for the Lima Southern Aurora cars.

Christine Hicks has produced more road signs including MPH speed limits, Narrow bridge warning,

Curve warning and Junction warning.

Limited stocks of BGM's VR 'U' van and water column have reached the hobby shops.

Broad Gauge Bodies have released a VR 'VHGY' bogie wheat hopper kit. They have also released a set of decals for the VR country passenger cars, and a set of white decals for the Vicrail 'GY' which should be available by the time these notes appear.

Recently arrived items from the Mainline range include the British Railways 03 class diesel shunter in BR green and blue liveries. A number of attractive small containers on a four wheel flat wagon have been seen which will provide variety for British modellers. The chances, however, of the Dean goods locomotive being available this year are receding.

The Wagon Co. have released a kit of the SAR 'Y' open wagon in HO scale. The kit is designed to run on the SAR style underframe also marketed by The Wagon Co.

Expected Arrivals.

Brass locomotive production has slowed a little but some models are due soon. Mansfields' 40 class is due in December. ALCO T class is due in October, the second run of Berg's 600/700 cars is due in a few weeks, BGM's X class is due in February and Casula's C32 is due in December. Also on the expected schedule is Berg's D55 and C36 along with Trax's Z12 and Baldwin tender.

The Lima OO scale model of the XPT is due soon, and will be available as single items.

Another delivery of McBees VR 'Z' van from the Model Company is due soon, but the complete delivery has been pre-sold.

Broad Gauge Models have advised of the production of the VR 'UB', being their 'U' van kit fitted with bogies.

ABL Models are back in production, if only in a limited capacity. A few of their 'GHG' guards vans kits have been seen in shops recently, and underbody detailing components are available in packets. They now plan to release an 'SHO' passenger van kit, and it should be on the market, in limited supply, by mid September. The made up kit has been sighted and it is a very attractive model and introduces a new and very good pattern-maker to the local scene.

Future Arrivals.

Christine Hicks has advised of her plans for the future which includes signs for: Pedestrian crossings, Railway crossings, Stock crossings, Stop and Give Way, Metric speed sign and Tram warning/safety zone signs.

Southern Models have released details of future models from Lima. The next locomotive will be the NSW '422' class diesel, the next piece of rolling stock the VR 'VLX', while the VR 'GY' is to be repainted red and the VR/SAR/AN 'ELX' repainted in the Australian National colours of green and yellow. Delivery details have not been announced, but do not expect any of them until at least late in 1984.

Broad Gauge Bodies have advised of future projects which include an SAR 'SOC/SO' ore wagon and a small country fuel depot. The 'SOC' wagons are used between Broken Hill and Port Pirie but have been sighted in Botany (NSW) full of rock for a sea wall.

McBees Hobby Centre have advised that the VR 'C' van, being produced in New Zealand by The Model Company, has been delayed. But they hope to have the pilot model in the near future. McBees have many other projects in mind for the VR modeller, details of which will be released as they are confirmed.

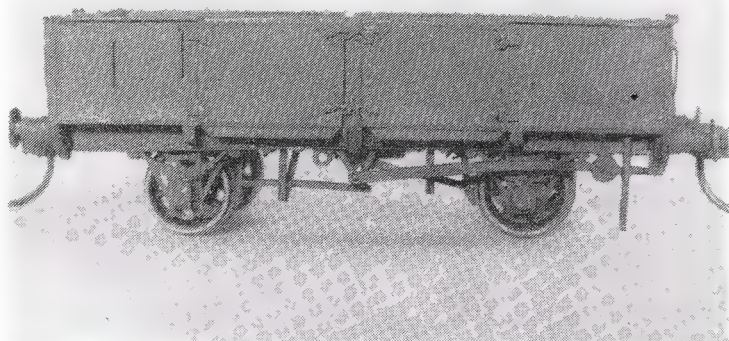
Main West Models advise that they have a real good set of patterns (by SJM) for a JHG on hand, and they hope to commence production soon. They also advise that the Stephen Johnson 400 class railcar is nearing completion, and that they are working on a 47 class diesel, which they hope to release at the Sydney Exhibition.

Casula Hobbies have advised that they are working on two more brass locomotives, the Z27 and the 81 class. Price and popularity will determine which model will be next.

Other News.

ABL Models is back in business after a short layoff, and they have a new postal address which is P.O. Box A300, Sydney South, 2000.

Tempest Electronics have moved into the mail order business, selling a wide range of model railway products.



S.A.R. 'Y' class open wagon kit by The Wagon Co. The kit is designed to fit on the S.A.R. chassis kit, also made by The Wagon Co.

MAILBAG

Continued from page 42.

painting it in the 'Gar Gar' colours of a lollipop bar as has been done with the 12 inches to the foot prototype model at the taxpayers expense.

How 'Philistine' and 'Ockerish' would one have to be to consider such a colour scheme as 'Normal' or even acceptable.

I would go even further in venting my feelings of inappreciation and nausea to say that in my view this garish colour scheme is tasteless and off-putting, with overtones of being 'Fruity'.

What's even worse is the fact that many vintage passenger cars of the former N.S.W.G.R. and N.S.W.R. now operated by the S.R.A., which I like to photograph and model, are being refurbished in this Frankenstein livery of the 81 Class, with many other classes of diesel locomotive befalling the same fate as they are outshopped from repairs.

Such a colour scheme in my view befits only the XPT and that's as far as it should have gone!

But be assured, I will not be the perpetrator of such a perpetual perverse nightmare by adopting the offending livery for any of my models.

Regardless, the nostalgic and most favourable colour schemes of the former N.S.W.G.R. and N.S.W.R. will live on in all the paint jobs displayed on my layout, even if it means committing a cardinal sin by painting a model of the 81 Class in the original colour scheme of the 422 Class or the reverse colour scheme as would have been the natural progression or maybe one day will be.

B. Cooke,
Enmore, 2042.

DIORAMA CONTEST

In conjunction with the Australia Day Model Railway Exhibition in January 1984, the Epping Model Railway Club is organising an open competition for model dioramas, on a railway subject. The diorama may be any scale, gauge or prototype with a maximum size of 1200mm by 600mm. For further details contact Doug Blunden on (02) 86 3432.

REVIEWS

Continued from page 45.

price with a minimum of painting and lettering processes. The side tank locomotives in particular would be strictly for children, whereas the saddle tank locomotives would not look out of place on any layout as a shunting locomotive.

Both locos have a fair turn of speed up high but can be controlled down to 6 kph (3.8 mph) and have a drawbar pull of 20 grams.

Graham Ahern

Southern Railways passenger carriages in OO scale by Hornby.

Two additional carriages, a composite and a brake 3rd, have been released by Hornby to complement the Schools locomotive 'Repton'. These carriages have the typical British side loading compartment layout with internal corridor and the models come complete with interior detail.

The models are spray painted in the dark malachite green to match the Schools locomotive with lining and lettering in gold. The lining is reasonably elaborate to imitate the panelled features of the sides and the linework is nice and sharp. The underframe and bogies are black and the roof is grey.

Overall, these are very nice models which complement the 'Repton' locomotive admirably. A period Southern Railways passenger consist can now be created which will no doubt please many British modellers.

Graham Ahern

Southern Railways Schools Class 4-4-0 steam locomotive in OO scale by Hornby Models.

This model was introduced in 1981 but will now appear in two new liveries, BR lined brunswick green and named 'Dover' and in Southern Railway dark malachite green and named 'Repton'. The Schools were Europe's most powerful 4-4-0s and 'Repton' is one of the three of the class to be preserved.

The sample of 'Repton' is nicely spray painted with printed lettering and lining in gold and white

with hand lining in white around the boiler and footplate. There is an abundance of detail including separately fitted handrails, whistles, safety valves and piping.

The model is powered by the latest Ringfield motor and like the other 4-4-0s in the Hornby range, is tender driven. It has a good turn of speed at the top end and a very good crawling speed of 2.46 kph (1.54 mph) and a drawbar pull of 47 grams.

This locomotive continues the high standards of detail and finish seen from Hornby in recent years. Unfortunately this will be reflected in the retail price in excess of \$100.

Graham Ahern.

CAN YOU HELP

For the preparation of future articles, we require information concerning the following classes of NSW rollingstock, and would be pleased to hear from any reader possessing the relevant data.

- KHG/NVKF Goods Brake Vans — logos and codes currently carried by cars 34202, 03, 04, 08, 11, 13, 15, 20, 22, 23, 26, 29, 32, 39, 43, 46, 48, 50.
- JHG/NVJA/NVJF Goods Brake Vans — logos and codes currently carried by cars 34002, 05, 09, 10, 12, 20, 32, 34, 36, 39, 40, 54, 58, 64, 72, 74, 80, 82, 93, 95.
- UHG/NVUF Goods Brake Vans — logo and code currently carried by car 34099.
- GHG/NVGA Goods Brake Vans — logos and codes currently carried by cars 30901, 13, 15, 21, 27, 35, 43, 45, 50, 52, 59, 61, 62, 63, 65, 66, 72, 79, 84, 85, 86, 88, 90, 92, 93, 94 and 31000, 05, 08, 10, 12, 13, 18, 19, 21, 28, 29, 33, 34, 35, 36, 43, 44, 47, 50, 53, 54, 69, 77, 82.
- MHG/NVMF Goods Brake Vans — logos and codes currently carried by any of these vans.

Please address data concerning these topics to the projects co-ordinator, Paul Rogers, P.O. Box 235, Matraville, N.S.W. 2036.

WESTERN MODEL RAILROAD SUPPLIES

Australian Distributors for



Current products available include:-

EMD SD40-2 Diesel Locomotive- undecorated
Diesel Cab Interior Kits — 5 types available
Caboose Interior Kit — suit wide vision caboose
Diesel Windscreen Wipers — HO scale — plastic
Diesel Windscreen Wipers — HO & O scale metal
Pass. Car Bogies — Commonwealth type — fully sprung

Dealer enquiries to: P.O. Box 46
VILLAWOOD.
N.S.W. 2163

Phone: (02) 601 6205

Have you read . . .

THE RAILWAY NEWS ?

The bi-monthly publication of the NSW School Railway Clubs Association.

Off-set printed & illustrated, with mainly NSW content and "Around the Museums" segment.

For sample copy & subscription details, please forward three 27c stamps with name & address to:

NSW SRCA,
P.O. Box 85, Sutherland, NSW, 2232.

MAIN WEST MODELS

Supplies of the new 43 class diesel designed for Mehano SD40/2 chassis, also kits to suit brass 43 mechanism, should now be available at Casula Hobbies.

One piece underbody detail casting to 'dress up' the Lima southern Aurora carriages has also become available. Led times for the magazine make the announcement of future releases difficult. Modellers are advised to visit Casula Hobbies regularly to keep in touch with all the latest developments

Main West Models
c/-Casula Hobbies
Phoenix Plaza
Liverpool — NSW — 2170

Casula Hobbies

Still the shop for models of Australian Railways

**PHOENIX PLAZA
MACQUARIE STREET
LIVERPOOL, N.S.W. 2170
PHONE: (02) 602 8640**

**MAIL ORDER DEPT.
CASULA HOBBIES
P.O. BOX 72
LIVERPOOL, 2170**

**COME IN AND BROWSE AROUND
WE'RE OPEN — MON. TO FRI. 9.00-5.30
THURSDAY 9.00-9.00
SATURDAY 9.00-12.30**

INJECTION MOULDED HO KITS

CAMCO KITS

CW 4 wheel cattle wagon	\$ 8.95
GSV 4 wheel sheep van	\$ 8.95
FO passenger coach	\$17.50
HGM open wagon	\$ 9.95
HGX open wagon	\$ 9.95

TRAX KITS

TRC refrigerator bogie van	ea \$ 4.95
MBC/MRC refrigerator van	ea \$ 5.40
S open wagon 4 wheeler	ea \$ 4.95
K open wagon 4 wheeler	ea \$ 5.55
RU 4 wheel wheat hopper	ea \$ 5.55
LCH coal hopper 4 wheeler	ea \$ 5.20
RSH 4 wheel rutilite hopper	ea \$ 5.95
CCH extended coal 4 wheel hopper	ea \$ 5.95

AR KITS

BCH/NHDA coal hopper	ea \$ 5.35
GLV/GLX/NGLX louvre box car	ea \$ 4.45
BWH/NGBA wheat hopper kits	to be released mid 1983.

MINI MODELS

BSV bogie sheep van	\$ 7.40
BCW bogie cattle van	\$ 9.65
CHS coal hopper	\$12.75

LIMA HO Scale

Models of Australian Railways

C38 steam loco — green	ea \$71.35
C38 steam loco — black	ea \$66.80
44 class diesel loco	ea \$39.85
44 class diesel loco — New reverse livery	ea \$39.85
VR S class diesel loco	ea \$39.85
42 class diesel loco	ea \$39.85
ANR GM class diesel loco	ea \$39.85
MBE 1st class passenger coach	ea \$11.55
TAM 1st class sleeping coach	ea \$11.55
MFE 2nd class passenger coach	ea \$11.55
INDIAN PACIFIC — 2nd class car	ea \$11.45
INDIAN PACIFIC — Dining car	ea \$11.45
INDIAN PACIFIC — Sleeping car	ea \$11.45
THE OVERLAND — Dining car	ea \$11.45
THE OVERLAND — Sleeping car	ea \$11.45
THE OVERLAND — 1st class car	ea \$11.45
THE OVERLAND — Power van	ea \$11.45
SAR/ANR 8300 brake van	ea \$ 8.35
VR VFNX bogie covered wagon	ea \$ 8.60
Flat wagon with TNT containers	ea \$ 8.60
Oil tank wagon — GOLDEN FLEECE	ea \$ 8.60
62' Oil tank wagon — AMPOL	ea \$11.10
ELX — VR bogie open wagon	ea \$ 7.65
ELX — SAR/ANR bogie open wagon	ea \$ 7.65
Oil tank wagon — BP	ea \$ 9.95
VR VMPY Auto transporter	ea \$ 9.95
VR GY open wagon	single \$ 6.25
VR GY open wagon	3 pack \$17.25

All prices shown are subject to change without notice.

SENTINEL N gauge C38 loco kit ea \$110.00

ORDERS/LAY-BY ARE NOW TAKEN

HO Scale

N.S.W. Z20 LOCO KIT

- * PRECISION MADE BRASS SIDE FRAMES
- * QUALITY WHITE METAL CASTINGS
- * AUSTRALIAN MADE WHEELS TO AMRA STANDARD

for mid year release
PRICE TO BE ADVISED

CASULA HOBBIES

* * * — NEW 10.5mm WHEELS for HO/OO gauge

Turned brass wheels fitted to nickle silver axles for 16.5mm gauge.

The wheels have RP25 profile.

The pinpointed axles are shaped like the prototype.

Selection of axle length — 23.8mm — 25mm — 26mm.

The 23.8mm axle length wheelsets are suitable for use with:- CAMCO 2AA Bogies, some

TRAX wagons, some PMH bogies and some Prototype bogies.

The 25mm axle length wheelsets are suitable as replacements for the LIMA wheel.

The 26.0mm axle length wheelsets are NMRA/AMRA standard and suitable for many uses.

To maintain a low price the wheels will be sold in bulk packs:-

Bag of 30 axles	\$22.50	Bag of 4 axles	\$4.00
Packet of 40 bearings	\$3.95		

RAILS NORTH MODELS

N.S.W. Epoxy Kits

K wagon water jin — 4 wheeler	ea \$15.95
KF container flat wagon — 4 wheeler	ea \$ 7.95
CG concentrate open wagon	ea \$11.95
BPV bogie powder van	ea \$14.95
MB 38' box car — matchboard siding	ea \$14.95
MB 38' box car — Masonite siding	ea \$14.95
NCX coiled steel carrier	ea \$14.95
BMF 40' flat wagon with milk tanks	ea \$14.95
MLV 40' louvre van	ea \$14.95

NEW * NEW * NEW * NEW

GP concentrate wagon	ea \$12.00
Signal Box	ea \$16.95
Water Tank	ea \$18.00

KITS OF NEWCASTLE FLYER SEVEN CAR 'HUB' SET seven car kits per set \$149.50 per set.

STEPHEN JOHNSON MODELS

N.S.W. Epoxy kits.

HG 4 wheel guards van kit	\$15.95
SHG bogie guards van kit	\$19.95
LHG bogie guards van kit	\$19.95
FHG bogie guards van kit	\$19.95
HGX composite passenger van	\$22.50

MAIN WEST MODELS

N.S.W. Epoxy Kits

48 class diesel loco kit	\$46.50
<i>Almost S.A. 830 class.</i>	
Requires 2 SPUD units at	ea \$25.00
421 diesel loco kit	\$38.50
Motorised Mehano chassis	ea \$19.50
MHG guards van kit	\$12.95
BX 'Dog Box' style passenger car	ea \$14.95

* NEW * NEW *

43 Class diesel loco kit	\$40.00
Air Conditioned car underbody detailing	
<i>For use under Lima Southern Aurora Cars.</i>	
3 Pack \$10.00	Single \$ 3.95
<i>(The above ALL NEW kits do not include bogies)</i>	

WEICO

N gauge white metal kits

Locos

NSW 42 class diesel —	\$13.95
NSW 421 class diesel —	\$13.95
NSW 422 class diesel —	\$13.95
NSW 442 class diesel —	\$13.95
VR S class diesel —	\$13.95
ANR GM class diesel —	\$13.95

Motorised chassis for above kits

Mehanotehnika	\$22.50
Minitrix	\$96.50

Guards Vans

NSW GHG	\$ 7.95
NSW FHG	\$ 7.95

Cars

Holden FX sedan pkt of 3	\$ 2.95
Holden FX utility pkt of 3	\$ 2.95

WEICO

HO scale white metal kits

Holden FX sedan	ea \$ 4.95
Bedford SB/Comair Bus	ea \$18.95

BROAD GAUGE BODIES

V.R. & S.A.R. kits.

10% off marked prices.

Full range of kits and decals in stock.

Send for list and price of available items.

MAIL ORDERS

If you order by mail, we assure you, we will treat you as a valued customer. Due to advertising lead times sometimes we are temporarily out of stock of some items. If we can't despatch the items you've ordered promptly, we will back order or refund your money if you prefer.

When ordering, write to our mail order dept., address at the top of the page. Please do not send CASH through the mail. Payment by Postal Note, cheque or Bankcard — please include card number, expiry date, authorisation and signature.

POSTAGE RATES

We regret that due to significant increases in postal charges on parcels, we have had to review our charges. It has become necessary to add a \$2.00 excess charge on all parcels above 500 g to destinations outside of N.S.W.

Orders up to \$4.99 value add	\$ 1.00
Orders \$5.00 to \$14.99 value add	\$ 1.50
Orders \$15.00 to \$29.99 value add	\$ 2.00
Orders \$30.00 to \$49.99 value add	\$ 2.50
Orders \$50.00 and over add	\$ 2.00
Interstate excess, please add	\$ 2.00
Airmail, registered, please add extra — we will refund any excess.	

CASULA HOBBIES NEXT CLASSIC BRASS MODEL FROM SAMHONGSA OF KOREA

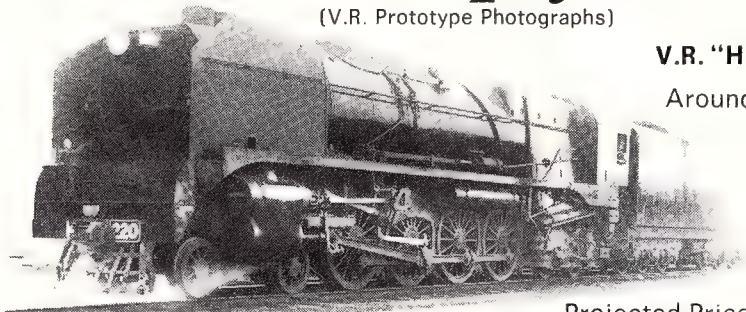
N.S.W.G.R. C32 CLASS AS REBUILT
DUE NOV/DEC, 1983.

Price \$425.00 if paid before November 1983.
Retail Price \$465.00

LAY-BY with 10% deposit is now taken.

The Line-up for '84

(V.R. Prototype Photographs)



V.R. "H" Class

Around April

Projected Price \$495



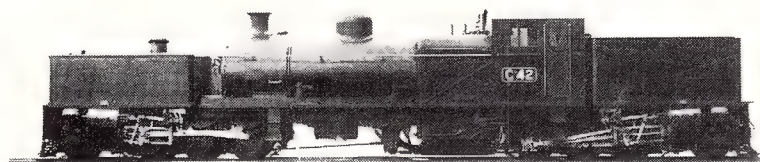
* V.R. "NA" (NBH Coaches to follow)
Around May

Projected Price \$395



V.R. "S" Class (Coaches to follow)
Around August

Projected Price \$485



* V.R. "G" Class

Around September

Projected Price \$575

* Both Narrow Gauge Locos built in HOn3 and HOn2½

* O Gauge will be built if sufficient firm orders received

AUSTRALIAN LOCOMOTIVE COMPANY

P.O. BOX 173, BORONIA, VICTORIA 3155

Christine Hicks

H O SCALE

AUSTRALIAN ROAD SIGNS

You asked for them in the AMRM 1981 Readers Survey, now they're here. Send S.S.A.E. for details and list of retailers.

P.O. Box 35,
FAIRY MEADOW. 2519.
(042) 29 6153

DON'T

be fooled by 'Copy-Cats' that try to
jump on our Band Wagon!

We are still the oldest and first supplier of Model Railway equipment from Germany. We are at it now for over 20 years, and have the experience and the know-how gained in all these years.

We stock (and we mean "STOCK"): L.G.B., POLA LGB, LINDBERG LGB, HMB LGB, MARKLIN, FLEISCHMANN, RO-CO, TRIX, LILIPUT, Rivarossi, MINI-TRIX, ARNOLD, RO-CO N, FALLER, VOLLMER, KIBRI, POLA, BUSCH, BRAWA, PREISER, MERTEN, NOCH, SEUTHE, MOSSMER, HERKAT, VIKING, HERPA, PRALINE, WILESCO.

We assure safe delivery, low cost, and accurate shipments. We are a US owned company, and you the customer are not a number but a friend. Some of our customers (oops, friends) are with us from the start.

We correspond in English, bank in England and the US so you have no problem with money transmittals, you can use any Pound Sterling or US Dollar money order, also of course German Marks.

We also have over 2000 Ship Models in 1:1250 and 1:2400 scale available in our catalog.

Shopping from us is like having a friendly Hobby Shop not around the corner, but just across the Ocean.

Want also become one of our "friends"? send A\$2.00 for our complete catalog listing, US \$ price list, and ordering info., which you will receive by airmail.

1983 Price List now available.

SPECIAL OFFER:

N.R.P. Box Car made for us by Marklin US \$8.95 Air Ppd.

NEW '83 MARKLIN MODELS NOT IN CATALOG, LIMITED EDITIONS:

3142 Norwegian Diesel Air Ppd US \$81.65

PRESTON HOBBY MODELLE oHG
P.O. Box 2280,
8600 Bamberg, West Germany
Telephone 0951-1 22 22



N GAUGE PRODUCTS



Rolling Stock Kits

E.M.U.s
D.M.U.s
Motorised Chassis
Bogie Sets
Pantographs
Trams

Catalogues
\$4.00 Post Free

CHAUCER HOBBIES
P.O. Box 70,
CANTERBURY.
VIC.3126. Ph.(03) 8367328

Structure Kits

Signal Box
Flats
Houses
Factory
Power Station
Tunnel Mouths
Footbridges
& many more.
Work Train
Various Huts, Sheds, Toilets, etc.
Level Crossing Set

Train Washers

Shops

Stations

Bridges

Fencing

Telegraph Poles

R.T.R. Locomotives

A nice range of freeland Diesel & Electric
Locos.

J.N.R. E.F. & E.D. Series Locos

J.N.R. ODORIKO-GO-EMU

6 car set.

J.N.R. 157 Series

5 car set in BRASS

J.N.R. 183 Series

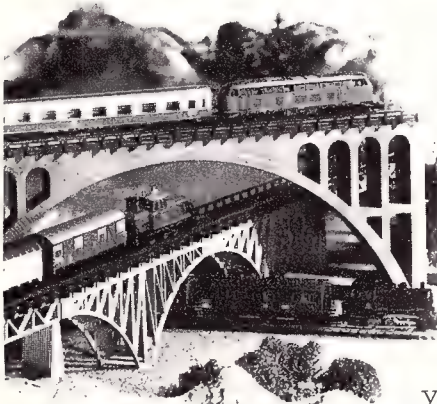
5 car set in BRASS

Coaches.



MODEL BUILDING KITS
AND SCENIC ACCESSORIES
FOR ALL MODEL RAILWAYS

Available from all leading hobby shops.



Whether you are just entering the fascinating world of model railways or you are an old hand, Faller has something for everyone. With a range of exquisitely detailed models and accessories in H0, N & Z, such as ours that is not too difficult.

Most layouts will have a station or two somewhere, or perhaps a wayside halt or a mainline station ---

you'll find them all in the

Faller range. Literally thousands of combinations could be made including level crossings, signal boxes, foot bridges and loco service depots. Then on to the open countryside,



your track could wind through valleys, over bridges, along rivers or into tunnels passing different trees and houses, embankments and cuttings - all in the Faller range. Then perhaps you like operating features such as

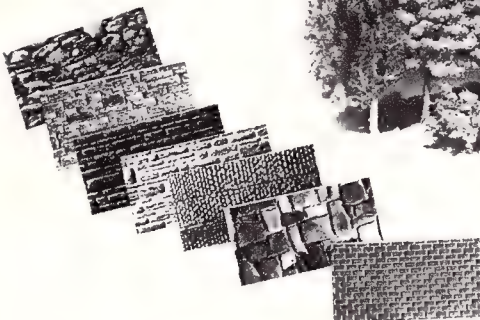
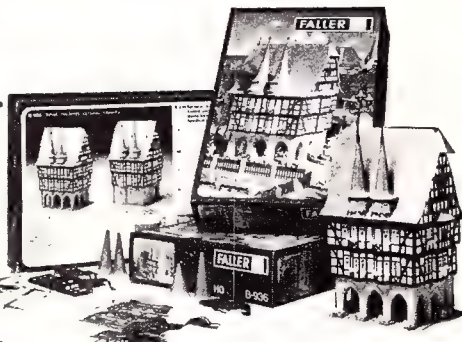
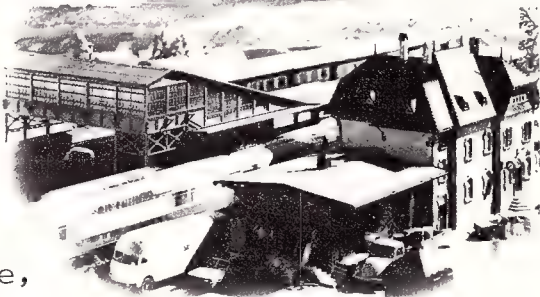
coal
mines
or
sand
quarries

- all there from Faller.

And with Faller nothing is left to chance. You get a quality product with full

instructions plus tips on how to illuminate buildings, make church bells chime, water wheels turn etc., - all in the Faller catalogue.

For your copy of the complete Faller catalogue with over 130 pages in full colour - complete the coupon below and post with \$2.00 to



Please send me the Faller catalogue.
\$2.00 is enclosed to cover cost and postage.

.....
.....
..... post
..... Code.....

FALLER DISTRIBUTORS

BOX 1648, G.P.O.
SYDNEY, N.S.W. 2001
AUSTRALIA

Telephone: 48-0481

SOLE AUSTRALIAN AGENTS

OXFORD PUBLISHING CO.

British Railways Standard Steam Around the Branch Lines No.1 Southern	\$19.95
BREL Locomotive Works	\$13.95
Complete British Rail maps Gazetteer 1830 — 1981	\$15.95
Freight Trains of British Rail	\$13.95
Freight Wagons Loads Service G.W.R. British Rail West	\$23.95
G.W. Absorbed Engines Pictorial Record	\$25.00
LMS Locomotives Vol 1 Illustrated History	\$30.00
G.W. Engines Pictorial Record	\$36.00
100 years of the G.W.R.	\$13.95
LNWR Coaches Illustrated History	\$19.95
Rail Atlas of Britain — 3rd Edition	\$ 9.95
Spirit of the Great Western	\$13.95
G.W. Engine Sheds 1827-1947 Historical Survey of	\$15.95
Steam in South Wales Vol.1 Valleys	\$11.95
Steam in South Wales Vol.2 North & West Swansea	\$13.95
Sunset of British Steam	\$13.95
LNWR Signalling A Pictorial Record of	\$25.95
The Power of the Class 56s	\$15.95
35 Years of Mainline Diesel Traction	\$15.95

BLANDFORD PUBLICATIONS

The Call of Steam	\$21.95
In Search of Steam	\$21.95

DAVID AND CHARLES PUBLICATION

Garratt Locomotive — 2nd Edition	\$29.95
Eric Treacy — Railway Photographer	\$29.95

Packing & Postage \$1.50.

RED HEART SOUVENIRS

P.O. Box 1013,
ALICE SPRINGS. 5750.
Ph. (089) 523128



*The home of
New and Used Brass*

Agents for:

SHINOHARA
BEMO Hoe, HOm
MASHIMA MOTORS
SAGAMI MOTORS
RIBU COUPLING SYSTEMS

THIS MONTH'S SPECIAL

BRAND NEW

RAYONIER No.45 2-6-2

Custom painted in Logging
Green — Undecaled

\$395



For Professional Paintwork

THE LOCOMOTIVE WORKSHOP

37 Woodmason Rd., Boronia, Vic. 3155

Telephone: (03) 762-3189

FOX CONTINENTAL MODEL RAILWAYS

We try to keep the full range of these superbly made European models all at factory suggested retail price.

New from Roco: 4126D BR 44 Reichsbahn
Steam loco \$118.00

4119C BR 01 Reichsbahn Steam loco

\$115.00

4122E Class 93 Tank loco DB \$ 84.00

4170A E loco SNCF \$ 61.00

4183A Diesel VT601

Set of 2 locos and 2 coaches magnet
coupling, light inside coaches \$164.00

4070A Set of three coaches. These
coaches are middle cars for
the VT601 set. Light inside coaches

New from Roco:

4126D BR 44 Reichsbahn
Steam loco \$118.00

4119C BR 01 Reichsbahn
Steam loco \$115.00

Fred Fox

Mail Order Service

P.O. Box 111, Doonside 2767
Phone (02) 622 6826

Showroom:- 80 Crawford Rd., Doonside.
Inspection by appointment only.

YOU NEED IT:

**KOODAK JEWELLERS
SUPPLIES
(VIC) PTY. LTD.**

Century Building,
125 Swanston Street,
Melbourne, 3000.
Australia.

Telephone: (03) 63 5815
Telex: 134817 KJS. VIC.

Suppliers of Tools, Equipment,
To the following:

- * JEWELLERS
- * OPTICIANS
- * SILVERSMITHS
- * WATCHMAKERS
- * ENGRAVERS
- * DIE SINKERS
- * ELECTRONIC ENGINEERS
- * INSTRUMENT MAKERS
- * DENTAL TECHNICIANS
- * TECHNICAL SCHOOLS
- * METAL CRAFTSMEN

**WE'VE GOT
IT.**



**GAUGE ONE
LIVE STEAM**

NEW EDITIONS

* **NEW YORK CENTRAL
'HUDSON' 4-6-4**

J1c. ASTER'S MASTERPIECE.
AVAILABLE JANUARY 1984

* **SWISS EB 35 PRAIRIE TANK 2-6-2**
AVAILABLE AUGUST 1983

Send \$10.00 for steam locomotive cata-
logue and manual.

J & M MODELS LIMITED

Handbuilt coaches and Midland
Compound locomotive.

**TENMILLE
PRODUCTS**

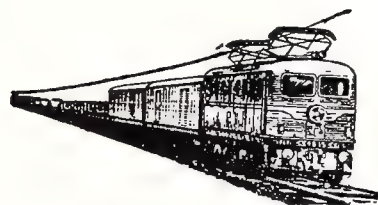
Gauge One flexible track, points
and rolling stock kits.

H.B. MODELS

Gauge One British locomotives in
Live Steam



Australian Racing Motors Pty Ltd.
P.O. Box 450, LEICHHARDT, N.S.W.
Phone (02) 819 6195



A suggestion to

N.S.W. Secondary School Students

Interested in Railways?

- Locomotives & Rolling Stock
- Signalling & Safe-Working
- Branch Lines
- Companionship of others your own age
with similar interests
- Co-ordination of activities, etc.

Then, you are invited to join the

N.S.W. School Railway Clubs' Assoc.
(Established 1956)

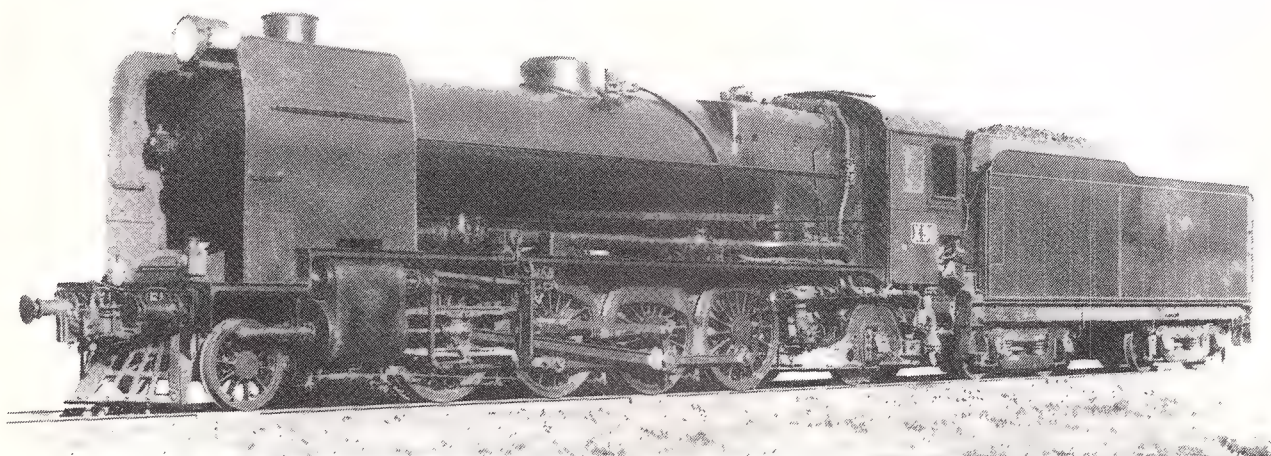
Benefits include:

- Bi-monthly illustrated magazine
"The Railway News"
- Sales Department
- Entertainment meetings
- Companionship of other your own
age with similar interests
- Co-ordination of activities, etc.

For further information, please write to:-
NSW School Railway Clubs Association,
P.O. Box 85,
Sutherland, NSW, 2232.

VICTORIAN RAILWAYS "X" CLASS 2-8-2 HO SCALE

This handsome heavy main line freight locomotive will be handcrafted in Korea by Samhonsa of Korea.



'X' class photograph Courtesy VicRail

Designed for fast and heavy freight service on main lines radiating from Melbourne, these giant 'X' class locomotives were amongst the largest to run in Victoria and 29 were built at Newport between 1929 and 1947.

This highly detailed and accurate model will feature a powerful can motor and Idler gearbox drive system, fully working Walschearts valve gear, stainless steel tyred wheels, complete cab and backhead detail, all visible booster pipe work fully modelled plus cab windows and headlight glazed to mention just a few of the refinements to be expected from this manufacturer.

A REDUCED PRICE OF \$415 (Subject to Tariff variation) is offered for models fully paid for prior to 31st January 1984, after that date the price will be **\$440**.

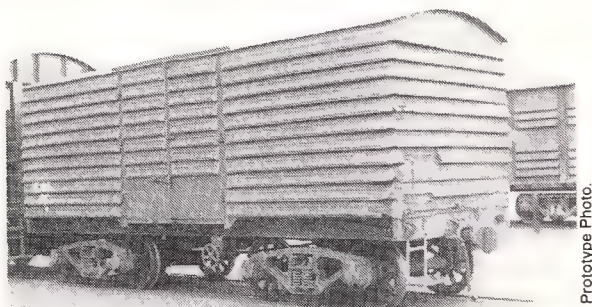
A number of models will be available **Factory Painted** for an **Additional \$35**.

Quantities are strictly limited so secure your order now with a **\$75 deposit**.

Contact your present supplier or B.G.M. direct.

Delivery expected mid February 1984.

VICTORIAN RAILWAYS "U" VAN . . . HO SCALE



Prototype Photo.

V.R. . . "UB" VAN . . . HO SCALE

Used widely as a General purpose louvre van, some displaying painted bill-board sides, this injection moulded polystyrene kit features easy to follow assembly instructions and includes Delrin bogies with spoked metal wheels and brake cylinder.

Price \$9.95

Complete your "U" and "UB" vans with our V.R. Style shunters steps and brakewheels in etched brass.

Price \$5.50

Also available in polystyrene the most accurate V.R. "GY" class open wagon kit in HO scale.

Price \$6.85

Complete your "GY's" with our etched brass brake lever and brake rigging.

Price \$6.50

"U" Van 4 wheel louvre van Kit in HO Scale.

PRICE \$7.95

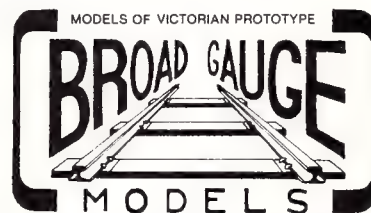


Prototype Photo.

Found adjacent to many station platforms, this accurate HO Scale model of a Victorian Railways 'C' class **Water Column** is now available as a white metal kit featuring movable spout, drain sump and assembly instructions. **Price \$7.95**

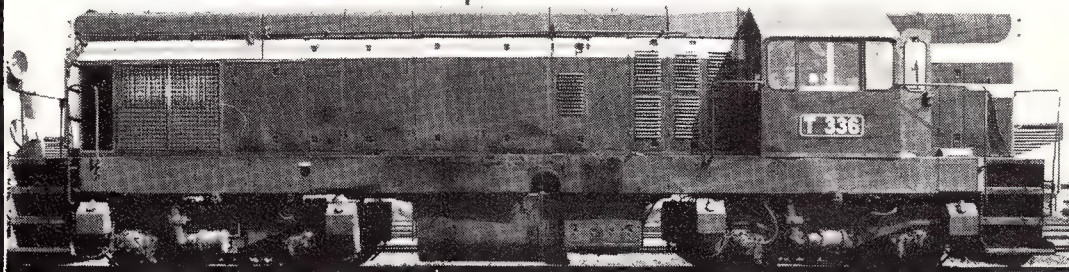
The above Kits for the discerning V.R. Modeller may be purchased from Hobby Shops, or direct from B.G.M. plus 5% postage.

BROAD GAUGE MODELS PTY. LTD.
P.O. BOX 136
BORONIA
VICTORIA. 3155



Reg. Office 511 Mt. Dandenong Rd., Kilsyth.

Due to your response . . . 30 extra units have been ordered



**FULLY
DETAILED
WITH CAB
INTERIOR**

AUSTRALIAN LOCOMOTIVE COMPANY

P.O. BOX 173, BORONIA, VICTORIA 3155

"LEADING THE WAY"

(V.R. PROTOTYPE PHOTO)

DUE OCTOBER, 1983
Projected Price \$275

Punchbowl Hobby Centre

545 Chapel Road
Bankstown NSW 2200
Phone 707 5082

We will be open Saturday, Sunday and Monday of the Long Weekend in October.

LONG WEEKEND SPECIALS

Lima 38 steam locos	\$70.00	Lima 44 Diesel Loco	\$38.00
Lima coaches	\$10.50	Kadee No 5	\$ 3.75
Athearn SD 9 chassis	\$25.00	Athearn U Boat Chassis	\$25.00
Mainline Coaches	\$10.80	Atlas SD 24 engines	\$40.00
Atlas FP 7 engines	\$40.00		

New Items:-

HO PV metal NSW kit
Lima NSW XPT

Athearn SD40-2
Roundhouse 3 truck Shay

N Brass engines including Trainmasters, RS 4/5 and Shays.
O NSW tank car kit with more items to be released

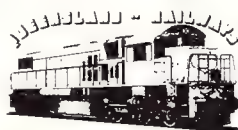
We carry a extensive range of locomotives, rolling stock, building kits and accessories from all the major suppliers for all popular scales.

RAIL TEES

T-SHIRTS Size 6-22 White-Cream
Books Posters Postcards Also available



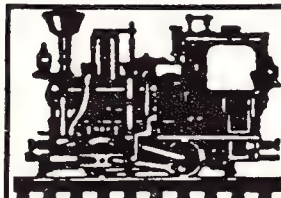
AUST. NATIONAL
HATS \$4.95
Large or medium, adjustable-
available in green or yellow



\$6.95
Plus \$1.50 Postage
and Packing

RED HEART Souvenirs

35 TODD STREET
P.O. BOX 1013
ALICE SPRINGS 5750
TELEPHONE (089) 523128



GAUGE
G: 45mm

**GOSH
GAUGE**

LGB

We've decided that the G in our name stands for Gosh! 'Cause that's what everyone says when they see it. You will too. Send \$3.00 for our full descriptive brochures.

P.O. Box 527,
MANLY. 2095
AUSTRALIA.

Phone: (02) 94 3280 AH

SHOWROOM

Level No.6
AETNA Life Tower
219-227 Elizabeth St.,
SYDNEY.
Ph. (02) 267 8548.

Send stamped
addressed envelope for coloured
L.G.B. brochure,
post free.

P.O. BOX 265,
FERNTREE GULLY, 3156

CHECK YOUR ORDER!
IS YOUR NAME AND ADDRESS PRINTED CLEARLY

FREE POSTAGE ON ORDERS OVER \$50.00 IN VALUE
ADD \$2.50 FOR POSTAGE ON ORDERS OF LESS VALUE.

BRAWA

OPERATING ACCESSORIES
for your model-railway layout in

HO&N&Z

LIGHTS and SIGNALS (most in brass)
ELECTRONICS and PARTS
CABLE CARS and TROLLEYBUSES

available from:

Catalogues & price list
\$ 3.50 posted

Hobby Dard pty.ltd.

Herkat

HO & N

LAMPS & LAMP KITS
ELECTRONIC ACCESSORIES
STEAM SOUND GENERATORS

available from:

Catalogues & price list
\$ 3.50 posted

Hobby Dard pty.ltd.

HO&N

POLA

LGB

BUILDING KITS

available from:

Catalogues & price list
\$ 3.50 posted

Hobby Dard pty.ltd.

We offer a wide range of quality model-railway equipment, scenic and operating accessories from the following brands in H0/00, N, Z, I, LGB

BUSCH		MOSSMER
FALLER		PECO
FLEISCHMANN		POLA
HELJAN		PREISER
HERKAT		ROCO
HERPA		ROSKOPF
H & M		SEUTHE
KIBRI		TEMPEST
LIMA		VOLLMER
MARKLIN		WIKING
MERTEN		WRENN

Special offer

for the month of october
or as long as stocks last:

HAMO 8306 H0 2 rail
4-6-4 T, class 78
DB Tank Locomotive
(as MARKLIN 3106).....\$ 137.50
MARKLIN H0 2 rail
"Fosters" Beer car....\$ 13.75
FALLER B-165 H0
(horse head)
Oil Pump kit.....\$ 14.75
FALLER 629 H0 + N
12-20 V ac
Synchronous Motor.....\$ 12.75
or both
FALLER B-165 & 629....\$ 27.00
BRAWA Lighting Socket
MS with bulb 14-19 V
/50 mA, cable & plugs
10 for.....\$ 7.50
(above prices include postage)

Catalogues and price lists are available upon request

Hobby Yard ^{pty.} _{ltd.}

P.O.Box 254, Melton Vic. 3337

Sales office: weekdays, Mon. - Fri. 9 am - 5 pm
Telephone: (to be advised), after hours: (03) 7431782

Mail order customers, please note:
any orders above \$ 50.00 are sent
surface delivery free; orders up
to \$ 50.00 please add max. \$ 5.00,
any excess postage will be refunded.

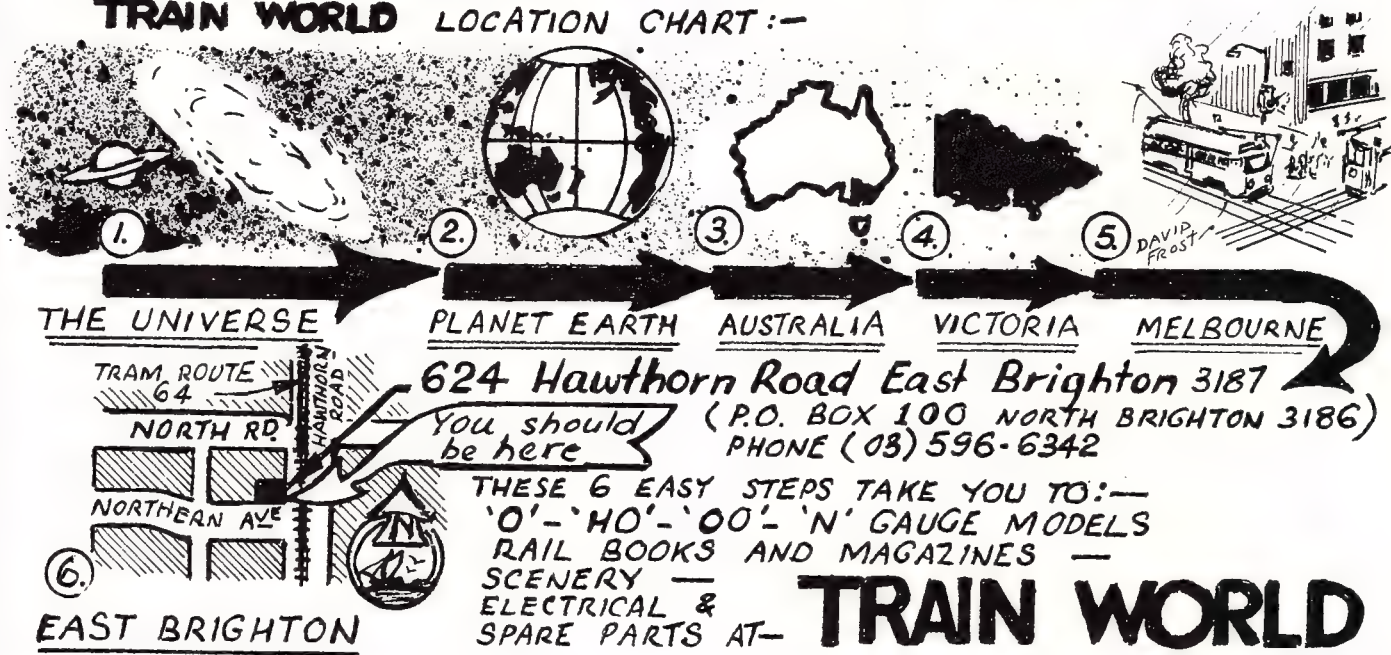


WELCOMI

Hobby Yard Pty. Ltd. is a private company incorporated in the state of Victoria with its registered office at 2 Drake Court, Melton, Tel: 7431782

What? after all we've done! you still don't know where to find **Train World**

LET US NARROW DOWN YOUR SEARCH WITH THIS HANDY
TRAIN WORLD LOCATION CHART:-



IMPORT HOBBIES

Australian Rolling Stock	\$ c
CAMCO	
CW 4 wh Cattle Wagon	6.50
GSV 4 wh Sheep Van	6.50
Any 5 above kits assorted	30.00
<i>Each kit includes wheels and decals</i>	

AR KITS	
GLV/GLX (NLGX) Box Car	4.70
GLV/GLX	5 for 22.50
BCH (NHDA) Coal Hopper	5.65
BCH	5 for 27.50
<i>Above kits require bogies and couplers.</i>	
<i>GLX also requires decals.</i>	

TRAX	
LCH Coal Hopper	5.25
CCH Extended Coal Hopper	6.00
RSH Rutile Hopper	6.00
RU Wheat Hopper	5.75
K Open Wagon	5.75
S Open Wagon	5.00
<i>Above kits require wheels, couplers and decals.</i>	

MINI MODELS	
BSV Sheep Van	9.90
BCW Cattle Van	9.90
<i>Above kits require decals and couplers.</i>	
CHS	11.80
<i>Above kit requires couplers.</i>	
Any 5 BSV or BCW	45.00
CHS	5 for 57.50

Mail Orders are our pleasure to

**4 Windemere Court,
ALBANY CREEK QLD 4035**
Telephone: (07) 264 2061

Australian Rolling Stock	\$ c
BGB	
SAR SGMX (AOFX) Gondola	7.85
VR VBBY-VBBX Louvre Van	7.50
VR VLEX (VSX)	8.30
VR VLF-VLX Louvre Van	7.85
VR ELX Heavy Duty Gondola	7.50
VR VP 103 (Rebuilt VP)	7.50
VR BMX-BP Box Car	7.50
VR VFSX (CSX) Coil Steel Wagon	10.40
<i>(Tarp or Untarped)</i>	
VR CSX Coil Steel Wagon	8.75
<i>(Untarped, no top frame)</i>	
VR VLX-VLCX Louvre Van	7.85
VR VOEX Open Wagon — includes load	7.85
<i>Above kits require bogies and couplers.</i>	
Any 5 VBBY, ELX, VP 103, BMX	for 36.00
Any 5 SGMX, VLF, VLX, VOEX	for 38.00

LIMA	
SAR/ANR Brake Van	7.85
SAR Guards Van (suit QR)	8.30
VR GY Open Wagon (expected soon)	6.25
VR or SAR ELX Open Wagon	7.40

Australian Passenger Stock	
CAMCO	
FO Passenger Coach	13.85
<i>Kit includes bogies, wheels and decals.</i>	
FO	5 for 65.00

LIMA	
Indian Pacific 2nd CI Car	9.25
Indian Pacific Diner	9.25
Indian Pacific Power Car	9.25
NSWR Sleeping Car	9.25
Any 5 of above assorted	for 45.00
NSWR MBE 1st CI Coach	10.40
NSWR MFE 2nd CI Coach	10.40
NSWR TAM Sleeping Car	10.40
Any 5 of above assorted	for 50.00

Australian Locomotives	\$ c
TRAX	
NSWR Z13 4-4-2 Tank Brass	250.00
NSWR Z20 2-6-4 Tank Brass	295.00
NSWR Z12 2-4-0 Tender (due soon)	325.00
NSWR C34 4-6-0 Locomotive	TBA
<i>(Expected February 1984)</i>	

LIMA	
NSWR C38 Black	68.25
NSWR C38 Green	73.50
NSWR 44 CI Loco early scheme	45.80
NSWR 44 CI Loco Later scheme	45.80
NSWR 42 CI Loco	45.80
ANR GM Class Loco	45.80
VR S Class Loco	45.80

NEWS BITS

We wish to announce an important change in our marketing policy. Owing to the high cost of importing models from overseas, especially following devaluation of the Australian dollar, we will specialise now in the marketing of Australian prototype models only. We will continue to offer associated support material, such as a complete range of track, signals, couplers, building kits, book etc.

We will endeavour, with the manufacturers' support, to carry the complete range of all Australian makers. However, owing to some marketing policies, this may not always be possible.

We have an extra special on the following Kadee:

No.5 10 packs/\$35.00

No.6,7,8,9,16 Any 10 packs asst/\$40.00

Any items not available at time of ordering will be backordered and supplied at the advertised price unless otherwise advised. Please note packing and postage is extra on all items and is charged at Post Office rates. Maximum \$2.00 packing fee. Please allow extra, any excess is refunded.

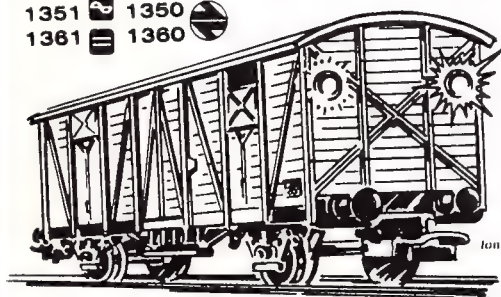
Electrotren HO NEW ITEMS 1983



SALES ENQUIRIES
Retail to Locomotion
Trade and Wholesale to Zelbo Pty Ltd.

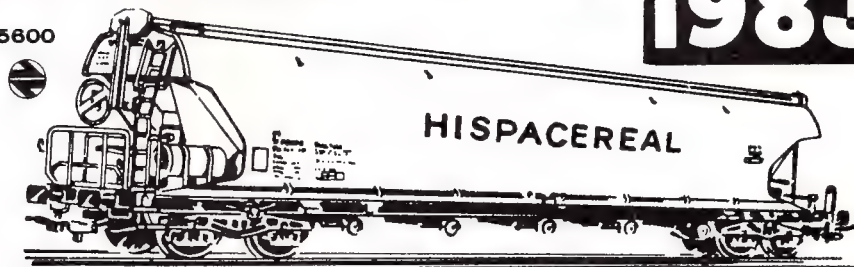
FABRICACION DE TRENES ELECTRICOS ESCALA "HO"

1351 1350
1361 1360



CLOSED VAN WITH FLASHING ELECTRONIC TAIL LAMPS

5600



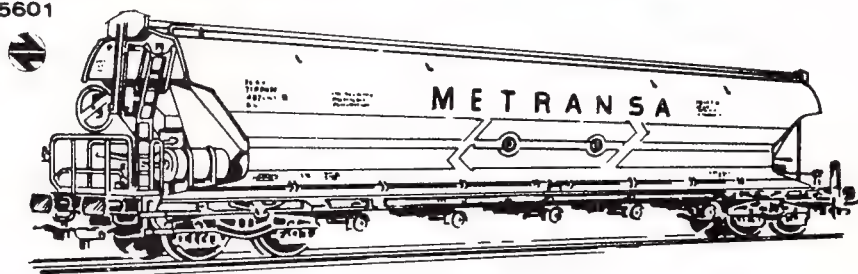
HOPPER WAGON FOR THE TRANSPORT OF CEREALS (yellow)

1603



CEMENT TRANSPORT WAGON OF THE "AUSILIARE" COMPANY (blue)

5601



HOPPER WAGON FOR BULK TRANSPORT (grey)

5511



OPEL-GM LARGE CAPACITY WAGON WITH SLIDING SIDE WALLS (red-silver)

SEE COMPLETE DISPLAYS OF
ELECTROTREN EQUIPMENT
AT THE SYDNEY AND ADELAIDE
MODEL RAILWAY EXHIBITIONS
IN OCTOBER 1983.

ALSO SEE ELECTROTREN AT THESE DEALERS.

- > dean model railways, orange 621242
- > austral modelcraft. ekibin, 483377
- > caseys toy world. gosford 242135
- > model railway centre. gymea 5248855
- > bill webb. figtree 295824
- > paulmacks hobbies & toys 965913

LOCOMOTION MAIL ORDER OFFERS: Free postage on orders over \$20.00 surface post within AUSTRALIA
BANKCARD MINIMUM PURCHASE \$10.00 PHONE 042 672496 all hours. 14 Jennifer Cresc., THIRROUL 2515
COLOUR CATALOGUE \$3.00 posted., OR free brochures available, send S.A.E.
SHOWROOM: Inspection by appointment. We stock 97% of all catalogue items, at all times.
IMPORTED AND DISTRIBUTED in Australia by LOCOMOTION PRODUCTIONS, (a division of zelbo pty ltd.)



PLEASE NOTE

LOCOMOTION

Made in Australia

TRAIN CONTROLS

now with

3 YEAR WARRANTY*

SPECIAL OFFER

MK3 Standard Control
END OF MODEL RUNOUT
NORMALLY \$57.60
For Oct & Nov \$39.95 each.
FULL 3 YEAR WARRANTY.

C.D. POINT POWER.

Strictly cash only direct from LOCOMOTION. No free post. No bankcard.

Mk3 Standard

Mk3 Deluxe

Twinnette

Continental 3 Rail

Mk3 Rotary Brake

AUSTRALIA'S PREMIER MODEL RAILWAY EXHIBITION

THE SYDNEY MODEL RAILWAY EXHIBITION

WILL BE IN THE
WESTCO & FORD PAVILIONS
R.A.S. SHOWGROUND, SYDNEY.
(DRIVER AVENUE)



MANY NEW LAYOUTS THIS YEAR

FEATURING OPERATING LAYOUTS, WITH SOMETHING TO INTEREST EVERYONE; FROM BEGINNER TO ADVANCED MODELLERS; FROM 'N' GAUGE TO '1' GAUGE; SCALE MODELS, COMMERCIAL MODEL TRAINS, PLASTIC MODELS, MUSEUM EXHIBITS, MODEL RAILWAY BOOKS AND PERIODICALS.

LABOUR HOLIDAY WEEKEND

SATURDAY, 1st October, 1983
SUNDAY, 2nd October, 1983
MONDAY, 3rd October, 1983

10.00am to 8.30pm
10.00am to 6.00pm
10.00am to 6.00pm

ADULTS \$3.00
CHILDREN & PENSIONERS \$1.00

Children Under Five Years Free

This is the 20th Exhibition presented by A.M.R.A. (N.S.W. Branch)

CATALOGUES.

NEW — Walthers 1983 O scale 368 pages
includes S scale \$15.95
(Post. Qld \$2.50; NSW \$4.25; Other \$4.85)

ATLAS HO

SD 24, FP7 Sante Fe \$41.95

ATHEARN

SD40-2 New price now available in
S.Fe, BN, CR, N & W. \$55.25

MODEL POWER

Sharknose PRR Red only \$48.95

New range **MDC** Car Kits, modern types
catalogue update and Shay info \$5.00
posted.

MDC

Book now for either model of the Shay
from Roundhouse

PECO N SCALE

Electrofrog Points in stock
'Y' & 18" Points \$10.15
Large and Curved points \$11.50

BEV-BEL

Bev-Bels line of Atlas cars painted for Bev-
Bel Corp
Green Background 4 cars Caboose, 90T
Hopper,
50' DD Box and 50' Mechanical Reefer
\$ 8.75

MODEL POWER N

Building Kits in Stock all \$ 8.95
1541 Burned House
1542 Building Cleaning Co.
1543 Rite Aid Drugs
1544 Marty's Meat Mart

AHM/Rivarossi O Scale

0-8-0 Static Kits now available \$75.00

We also stock Shinohara, Sagami, Kato,
Heljan,
Minitrix, Con-Cor, Floquil, Microscale, At-
las,
Bachmann etc . . .

Mail Order a Pleasure
BANKCARD WELCOME

J. & J. HOBBIES
P.O. Box 155,
(15 Selwyn Street)
BEAUDESERT. QLD. 2485.
Phone (075) 411014

STATEMENT FROM TEMPEST ELECTRONICS

A personal notice to all our retailers and
customers:-

To inform all concerned that **Tempest Electronics** has not entered into any finan-
cial or partnership association with Loco-
motion or vice-versa, who are only an ac-
credited retailer of our products.

We apologise for any inconvenience
either our or Locomotions' advertising may
have caused.

Also, that all trade letters of enquiry be
addressed to:

TEMPEST ELECTRONICS,
P.O. Box 265,
FERNTREE GULLY. 3156.

G.Harris. Mgr.
TEMPEST ELECTRONICS

QUALITY AND CHEAP MAINLINE RAILWAYS

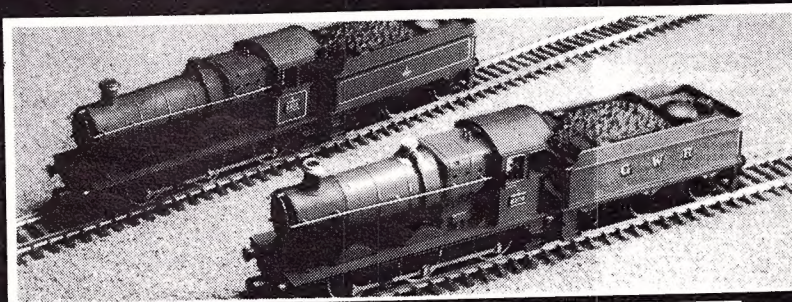
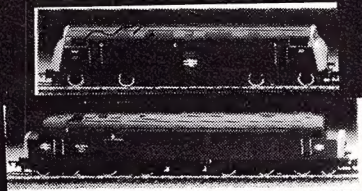
GUARANTEED SIX MONTHS, against manufacturers fault
SUPERB accurate MOULDINGS and PAINTING
STANDARD British COUPLINGS, fit most 'OO' brands.



It takes months of research to ensure
every Mainline model is just like the
real thing!



RELIABLE LOCO'S
from only \$34-50



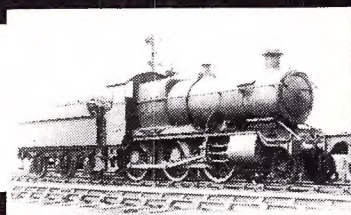
CHECK the DETAIL on this usefull Collett loco
Shunting, Goods or Passenger. B.R..Black.
with TWO FREE COACHES
from participating dealers \$55-00

QUALITY AND CHEAP

COACHES around \$14-95
BR: GWR: SR: LNER: LMS.

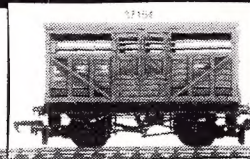
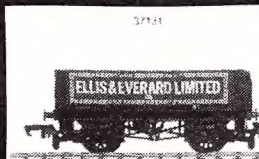
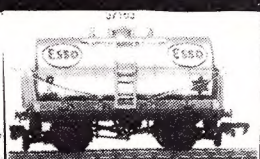
MOGUL 2-6-0
Full cab detail
smooth running

only \$ 71-95



WAGONS
from \$4-95 each.
ASK to see the
14 NEW ONES !

87 CHEAP WAGONS



TRY THESE HOBBYSHOPS. Bergs, Parramatta. Hudsons, City. Northern, Lismore. Toyman,
Yennora. Casula, Liverpool. Western, Penrith. Andertons, Coffs Harbour. Fantastic, Sydney.
Northside, Carlingford. or ask your favourite Hobbyshop to order from :-
INTOYS PO BOX 33, SPIT JUNCTION, NSW , 2088. Ph 02-949-2240.

PRIVATE: 10 cents a word, name, address and phone number included. Minimum \$1.50 per insertion. Advance or continuous insertions not accepted.

COMMERCIAL: \$2.00 per line, minimum of \$7.00. Advance continuous insertions not accepted.

All monies must accompany copy, which must be clearly written on paper. Definitely no phone insertions accepted. If stamps are used as part payment, each stamp must not exceed the standard postage rate, and must not be attached to any paper.

Send all copy and payment to SCR Publications, PO Box 235, MATRAVILLE, 2036.

WE ARE in the process of formulating a register of modellers of American prototypes in all scales. Our aims are to encourage contact between modellers, to share information and news of interest, with a view to possible future ventures such as bulk discount buying, producing private deals for members and so on. To register, send SSAE and particulars of your prototype, scale and era modelled to - Railhead, PO Box 34, Cheltenham Vic. 3192

FOR SALE

FOR SALE All prices include post, packing, cert mail. Reg \$5 extra for trains, no quart if item not reg. Bergrs T30 tank loco \$400 mint. Kits - Prototype mint \$19 \$400 or best offer. FSM C35 \$130.00. Mags - \$36 year unless other marked. AMRA Journal July, Nov 1970, 1973, 1974, 1975, 1976, 1977 to Sept \$18 lot. Model Railways 1974 Railways 1952 Feb, March, June, July, Aug \$10. Constructor 1974 March, April, Sept to Dec \$18. 1975 Jan, March to June, Aug to Dec \$30. 1976 May missing \$33. 1977, 1978 Jan, Feb, April to Aug \$21. Railway Modeller 1952 Feb, March, Dec. 1953 Nov. 1954 March, 1955 Aug, Nov \$21 lot. 1963 Oct, Nov, Dec. 1964 Jan, March, April, May, July, 1965 Feb, March, July, Dec \$36 lot. 1966 Sept, Oct \$6. 1972, 1973, 1974, 1975, 1976, 1977, 1978 to Oct \$30. 1979 Jan \$3. Newsletter various copies 88 to 124 \$12. Bulletin July to Dec 74, 1975, Jan to April 76 \$33 lot. Narrow Gauge 2 folder \$1.55 to \$7.30 lot. Patter, Vol 2, 3, 4, No1 No5 \$8 lot. Switchback 13 copies various years \$10. Digest Vol 12, Vol 13 9 copies, Vol 14 2 copies \$8 lot. Network Vol 15-16 9 copies \$10. Model Railway News Nov 67 \$2. Railway World Sept, Nov Dec 1952 \$6. Trains III 1952 Feb to July, Sept to Nov \$12. Railway Mag 1952 Feb to Oct \$9. Craftsman 1973 Aug, Oct, Nov, 74 Jan, May, Oct \$12 lot. Railroad Modeller 73 Nov, Dec, 74 Jan, May, Aug, Sept \$18. Model Railroad 1967 Feb, Sept, 1972 Sept, 1973 Dec \$12 lot. Constructor 1952 Feb, March, April, Dec \$12. 1956 Feb, March, May, Aug to Nov \$28. 1966 March, April, June \$9. 1967 Jan, May \$6. 1968 Feb, May, Sept \$9. 1969 Aug, Sept \$6. 1970 Sept \$3. 1973 Dec \$3. 1977 S Hicks. PO Box 10, Padstow 2211.

COLLECTOR reducing collection. Great opportunity to acquire out of production brass locomotives. Bergrs D59 oil, D59 coal, D57, C35, Mansfield C38 Streamlined, C38 standard, all \$549 (each). Dockyard 2nd run Garrett re-motored, painted and weathered \$1049. Mansfield 43 \$349. Bergrs C36 roundtop, C23, C30T, CPH Railmotor, \$299 (each). C30 \$249. Alco C630 Lownose \$249. Also Bocking 41 painted \$299. Wrenn Class 20 \$35. Hornby Class 47 \$35. Colin McLeod, Skye Motel, Holbrook 2644, (060) 36 2333.

BRASS HO. Westside K27 Comp \$295.00. Baldwin 2-4-4-2 'Little River' \$350.00. Pennsylvania 0-4-0 switcher painted and lettered, can motor \$295.00. Western Maryland 2-8-0 (2 off) \$295.00 ea. C&O J3 4-8-4 \$350.00. C&O J3A \$350.00. Santa Fe 4-8-4 \$350.00. Phone Keith Baldwin (052) 353277 A.H. or (052) 314289 B.H. **DOCKYARD 38** First run \$225. Hobbitown 40 class (see AMRM Jul/Aug '71) \$150. Atlas FP7 (SF) \$30 new. AHM U25C plus dummy (NP) spare body (SF) \$75 new. Ferris 'O' suburban set \$100. O.N.Os P. Garrett, 92 Eucumene Drive, Duffy, ACT 2611. Ph (062) 884252.

TT TRIANG British (never used, boxed) 2 x Suburban brake, 2 x milk, 2 x mineral, WR Brake. Best offer (042) 293928.

NSWRG Layout, 4.2m by 2.5m, transportable, large junction station with hidden sidings, scenery 90% complete, some buildings \$1150 - Delivered in Sydney Area. Phone James McInerney (02) 747 5894.

HO TRIANG Sydney Suburban electric, dummy power, trailer, never used. Fleischmann coal hopper U.S. (boxed). Best Offer (042) 293928.

PARLY built 5 inch gauge 0-6-6 steam locomotive 'Anne', including all plans, castings, fittings and tested boiler etc. \$1800.00. E. Garde (047) 392861.

BRASS Bergrs mint 1st run C36 Belpaire and Roundtop versions, \$300 each. Also, some assorted mint Marklin locos (02) 239 3278 BH or 977 3367 AH.

BERGS Brass D59 coal burner. Mint condition. Test run only. \$500. Phone (049) 328748.

HO Layout. (Double track, out and back, branchline) to suit room 3875mm x 2570mm. No scenery. Lima Australian outline rolling stock (four locos); 2 controllers; wiring fully documented. Cost \$1200 - Sell for \$700. Matt Bolton, Bellowrie, Qld (07) 202 6053.

QUITTING HO for On3 - high quality items. Eastern US roadname rolling stock VG, WM, B&O and C&O. Athearn & Roundhouse hoppers, box cars, tank cars, etc steam era \$3.00 ea new! Logging cars by Schoa, Woodland Scenics kits, motor vehicles, structure kits by the masters of Fine Scale Miniatures - my prices are very fair. Magnuson Models excellent buildings, Durango Press etc, NJ International fibre optics signals. Brass B&O 0-8-0 last run \$220. 2 x Harrington Shays modernized versions 1920s \$375 ea. All by PFM. 20,000 Campbells track ties (sleepers) all as new! Not used. Kadee 711s \$2.70 pk, Roundhouse 3 in 1 kits for \$7.00 ea. Interested? Ring (08) 339 2605 for details.

'HOUSE O' Gauge C38 loco and tender, 2 carriages (1 buffet), 1 passenger guards van, 2 carriages still in kit form, 1 goods guards van, 1 Shell tanker, 1 refrigerated van, 1 RU truck, 1 smaller open truck - all modelled on NSWGR rolling stock. 1 transformer and controller. \$1,000.00 the lot. New Mansfield, 42 6th Ave., Kedron, 4031. Phone (07) 57 6726.

WANTED

BRASS HO Westside or P.F.M. K28 D&RGW, S.P. narrow gauge, D&RGW standard gauge locos, G. Northern M2. Ph Keith Baldwin, (052) 353277 A.H. or (052) 314289 B.H.

WANTED Older type 'O' gauge tinplate, diecast, clockwork and electric trains by Hornby, Robitell, Lionel, Bassett-Lowke Etc. Also Hornby-Dublo Two and Three rail. M Bodinar, 4 Tarwin Court, Nth Dandenong, 3175. Ph (03) 795 3646.

COMMERCIAL

KOODAK stands for tools. For the model railway specialist in search of those hard to obtain tools. We can solve your problem. Ask for our Catalogue and compare our prices. Koodak Jewellers Supplier (Vic) Pty Ltd, 4th Floor, 125 Swanston Street, Melbourne, 3000. Phone (03) 63 5815.

AUSTRALIA

AUSTRALIAN RAILWAY HISTORICAL SOCIETY

is Australia's largest railfan organisation. Membership information can be obtained by writing to the membership officer in your capital city.

ACT-PO Box 112 Civic Square ACT 2608
NSW-PO Box E129 St James NSW 2000
QLD-GPO Box 682 Brisbane Qld 4001
SA-GPO Box 507 Adelaide SA 5001
TAS-PO Box 162 Sandy Bay Tas. 7005
VIC-GPO Box 5177AA Melbourne Vic. 3001
WA-GPO Box S1319 Perth WA 6001

NSW - CENTRAL WEST

DEAN MODEL RAILWAYS

Serving The Central West

Large Range of Australian, American, British, HO, OO, N Locomotives, Rolling, Stock, Track, Accessories Kits, Scratch Building Supplies, Used Equipment Bought & Sold. Repairs Mail Order.

60 LORDS PLACE, ORANGE. 2800

(063) 62 1242

N.S.W. - SYDNEY

RAILWAY BOOKS

For the best and cheapest range of Australian and overseas railway books. Send a large SAE for book lists (which change every month), or call into -

ARHS SALES

27 Belmore Street, Surry Hills, NSW 2010

(PO Box E129 St. James, NSW 2000)

Monday to Friday - 1200 to 1830

Saturday - 0900 to 1600

Telephone (02) 212 1201

NSW - SYDNEY

Comprehensive range of HO & N scale

Model Railway Equipment.

Special emphasis on N.S.W. outline and scratchbuilding and detail parts.

KEITH HUDSON'S MODELLERS'S WORLD

75 Goulburn St., Sydney, 2000

Ph (02) 212 1667

A SUBSCRIPTION

to the

AUSTRALIAN MODEL RAILWAY Magazine

Can be obtained from SCR Publications, PO Box 235, MATRAVILLE, 2036 for the price of \$13.75 (within Australia) or \$16.50 (Overseas surface mail). The subscription includes 6 issues and a renewal reminder card.

Send monies by cheque or postal notes to the above address, clearly writing name and address. Please note: Subscriptions begin with the next available issue, although monies should be received one month before a due issue.

Subscriptions are for one year only. Receipts are not sent unless an SSAE accompanies order.



F & G MODELS

BRING YOUR LAYOUT TO LIFE

with our quality painted cast detail parts eg. train crew, machinery, boom gates sacks, bins, boxes, barrells & many more at your hobby shop or send SAE for list

P.O. Box 149 KILSYTH 3137

(03) 754 5758

N.S.W. - MERRYLANDS

We try our most to stock a host of HO, OO, OO9, TT & N scale equipment. Why not pay us a call and have a browse round or drop us a line for our latest price list. Mail order a pleasure.

Open Sat. till 4pm. Closed Wednesday.

ALCE'S HOBBY SHOP

Shop 6, 20 McFarlane St., Merrylands

P.O. Box 257, Ph. (02) 682 3775

N.S.W. - SYDNEY

ASTER

Model Railway Locomotives

Live Steam No. 1 Gauge

Showroom - Open 10am to 2pm

Level 6, AETNA Life Tower.

219-227 Elizabeth St., Sydney

P.O. Box 527, Manly, 2095

Phone (02) 267 8548. AH: (02) 94 3280

N.S.W. - SYDNEY

Fantastic models shown by enthusiasts. Tremendous range OO, HO & N sets, locos, track and accessories. Mail Orders, Laybys and Bankcard welcome.

THE FANTASTIC MODEL SHOPS

34 Angel Arcade, Ash St., Sydney, 2000

Ph.(02) 232-2318

N.S.W. - BANKSTOWN

We stock HO, OO & N gauge model trains, Accessories and Kits.

PUNCHBOWL HOBBY CENTRE

545 Chapel Road, Bankstown.

Ph. (02) 709 5082

N.S.W. - GYMEA

HO and N gauge rolling stock, track, building kits and accessories.

LAY-BY BANKCARD

THE MODEL RAILWAY CENTRE

106 GyMEA Bay Road, GyMEA

Ph. (02) 524 8855

N.S.W. - CAMPBELLTOWN

TRAINWORLD HOBBIES

MARKLIN SPECIALISTS

(Mail Order)

We sell the following brands - Marklin, Lilliput, Roco, Peco, Vollmer, Electrotren, AMC products, AMRI products, Minित्रix. (Large range of Marklin spare parts in stock).

PO Box 490, Campbelltown, 2560

Ph. (046) 25 5861 or (046) 25 1745

N.S.W. - MINTO

MINTO HOBBIES & TOYS

'SERVICING THE CAMPBELLTOWN AREA'

Large range of kits and radio control planes - cars

- boats.

Layby - Mail Order - Bankcard Welcome here.

Open 6 Days - 5% Discount for club members

We do repairs on locos

Shop 3, Minto Mall, Minto 2566.

Phone (02) 603 3242 or (046) 26 8826.

N.S.W. - GOULBURN

Wide Range HO/OO & N gauge model railroad rolling stock - track, kits & accessories.

EXPERT REPAIRS - MAIL ORDER/ENQUIRIES WELCOME

M.G.C. HOBBY CORNER

Cnr. Mundy & Auburn Sts., Goulburn

P.O. Box 217, Goulburn, 2580

N.S.W. — PENRITH PENRITH TOY & HOBBY CENTRE 425 High Street, Penrith Ph. (047) 21 8314	VICTORIA — CROYDON BRANCH LINE Your complete Model Railway Hobby Centre 490 Dorset Road, Croydon, Victoria. 3136. Phone (03) 723 1211 Hours: Opens 10 a.m. Mon.-Fri. 9 a.m. Sat. Closes 6 p.m. Mon.-Thurs. 9 p.m. Fri. 1 p.m. Sat.	QUEENSLAND — BRISBANE MARKLIN MAIL ORDERS APPLIANCE SERVICE CO. 9 Gowrie St., Mount Gravatt Qld. 4122 also 112 Stafford Rd., Kedron. Phone (07) 3497865
N.S.W. — NEWCASTLE Model Railway Specialists HO, OO & N Rivarossi, Hornby, Lima, Peco, Kadée, Roundhouse, Athearn, Mainline, Campbells, Jordon, Calscale, Bachmann, Trax, Wiking, K&S Brass, Plastruct, Arnold Badger, Superquick, Merten, Scenic Items and many others. Mail Order. Authorised Hornby Service Agent — Repairs all makes. VIC BARNES CYCLE & MODEL TRAIN CENTRE 213 Lambton Rd., New Lambton, 2305 Ph. (049) 52 1886	VICTORIA — MORWELL MORWELL ELECTRONICS Gippsland Model Railway Supplies O — HO — OO — N — Z Accessories & Kits. 128 George Street, Morwell 3840 Ph (051) 346133	QUEENSLAND — BRISBANE RAILWAYS EXCLUSIVELY. Scratchbuilders parts, Wood shapes, planks, roof sections, trucks, couplings, wheels. Kits and RTR by most scale brand names. O — HO — N and Narrow. Gauge in these scales. Roundhouse spares. Mail Orders Welcome. AUSTRAL MODELCAST 101 Laura St., Ekibin. Mail to P.O. Box 60 Annerley, 4103. Ph. (07) 392 1484
N.S.W. — CENTRAL COAST MODEL RAILWAY SPECIALISTS LGB, HO, OO, HOe, N Fleischmann — Hornby — Lima — Marklin — Ibertren — Electrotren — Lilliput — Roco — Roundhouse — Minitrix — Bachmann — Athearn — Mini Models — Camco — AMRI — Trax — Kadée — Badger — Peco — K&S — Eda — Pola — Kibri — Vollmer — Heljan — Con-cor — Merit — Locomotion, etc. All Makes Repaired CASEY'S HOBBIES Imperial Centre, Gosford. Ph. (043) 24 2135	VICTORIA — MELTONE HOBBY YARD CONTINENTAL MODEL — RAILWAYS SCENIC & OPERATING ACCESSORIES P.O. Box 254 MENTONE 3337	QUEENSLAND — UNDERWOOD THE HOBBY WAREHOUSE 30 Kingston Road, Underwood, Qld. 4119 Ph. 341 2662
N.S.W. — DUBBO Serving the Model Railroad Enthusiast in the West. Large range of Rivarossi, Arnold, Peco, Kadée, Prototype, Roundhouse, Friedmont, MRC, Lima, Wrenn, Hornby, Airfix, Books, Accessories, Tools, Paints, AMC Products. MORGANS HOBBIES 59 Boundary Road, Dubbo	VICTORIA — EAST KEW HOBBYCRAFT FOR Model Railways 1351 Burke Rd., East Kew, 3102 Ph. (03) 80 3241	S.A. — GLENELG Featuring the 20c in-the-slot electronic 'N' gauge dioramic display that you can drive. Our HO and N stock includes Hornby, ROCO, Lima, Peco, Rivarossi, Fleischmann, Arnold Rapido, Falier, EDA, Zero 1, Tempest, AMRI, Kalmbach. Open 7 days a week till 7.30pm. GLENELG TRAINS & TRONICS 71 Moseley Street, Glenelg. 5045 Ph. (08) 294 2450
N.S.W. — WOLLONGONG BILL WEBB Model Railways Established 1975 MAIL ORDER SPECIALISTS for Continental equip- ment from Fleischmann, Hag, Brawa, Seuthe Smoke Generators, Metropolitan, Salota Multi- Train Control, Fulgurex, Marklin, Vollmer HO and N Catenary, Roskopf Military Vehicles and Sommer feldt HO & N Catenary. PO Box 68, Figtree. 2525 Ph. (042) 29 5824	VICTORIA — BOX HILL THE ENGINE SHED 5 Carrington Road, Box Hill, 3128 Ph. (03) 89 7027	S.A. — WHYALLA WESTCOAST MODEL SUPPLIES MAIL ORDER & BANKCARD WELCOME 12 Fisk Street, Whyalla Norrie. 5608 Ph. (086) 45 0679 a.h.
N.S.W. — FORESTVILLE FORESTVILLE HOBBIES and TOY CENTRE Shop 3 — The Centre Darley St., Forestville. Ph (02) 451 0083 Open to 9pm Thursday nights HO/OO — N — Z Gauge MARKLIN — LIMA — HORNBY — PIKO — MINITRIX — G/FARRISH BACHMANN — AMC & AMRI Products — FALLER — HELJAN CAMCO — A & R KITS	VICTORIA — SYNDAL Hobbyline 264 Blackburn Road, Syndal, 3149 Ph. (03) 233 2398	S.A. — ST. MARYS Discount model railway specialists, specialising in ATHEARN Spare Parts — Locos — Rolling Stock, etc. Mail Order and Bankcard Welcome. THE MODEL TRADING POST 1193 South Rd., St. Marys, 5042 Ph. (08) 276 1863
A.C.T. — CANBERRA Model Railway Specialists — HO — OO — HOOn — N Marklin — Hornby — Zero 1 — Lima — Trax — Airfix — Rivarossi — Roco — Lilliput — Roundhouse — Athearn — Ratio — Grafar — Minitrix — Kadée — Peco — Mainline — Model Power — Superquick — Kibri — Pola — Vaupe — Heljan — Arnold — Bachmann — H & M — Eda — AMRI — AMC — Falier BRASS LOCOS AUSTRALIAN & U.S.A. and more PETER PAN HOBBY CENTRE 38 Garema Place, Canberra City A.C.T. Ph (062) 48 7994	VICTORIA — MENTONE SPECIALISING IN 'N' SCALE Featuring 'KATO' THRIFT PARK TOYS Shop 23, 16 Lr. Dandenong Rd., Mentone Vic. 3194 Ph (03) 583 4282 Inside the Arcade — Junction of Lower Dandenong Road and Nepean Highway.	S.A. — ADELAIDE THE MODEL RAILROADING HEADQUARTERS FOR S.A. SPECIALISING IN HO & N SCALES LOCOS ROLLING STOCK TRACK SCENIC and ACCESSORIES BOOKS MAGAZINE BANKCARD — AMERICAN EXPRESS — DINERS Mail Order & Repair Service BRIDGLANDS HOBBIES 81 Pirie Street, Adelaide 5000 Ph. (08) 223 3782
N.S.W. — CARLINGFORD MODEL RAILWAY SPECIALIST — LARGE RANGE OF HO, HOOn$\frac{1}{2}$ and N. TENSLOD SPUD, JAPANESE N SCALE PRODUCTS. MAIL ORDER WELCOME. PLENTY OF PARKING. OPEN SATURDAY AFTERNOON. NORTHSIDE HOBBIES Shop 56, CARLINGFORD SQUARE, CARLINGFORD. 2118. Phone (02) 872 3553	VICTORIA — BRIGHTON BRITISH TRAIN'S SUPPLY For all English 'OO' ready to run models. Layouts built to order. 125 Thomas Street, East Brighton Ph. (03) 578 4337 Open to 9.30pm Thursday and Friday Open to 1.00pm Saturday	NORTHERN TERRITORY — DARWIN DARWIN HOBBY CENTRE Serving Australia's Northern Modellers HO & N gauge Australian and American Model Railways, Locos, Wagons, Peco Track, Various Building Kits, Tracksides Acces., Plastruct and K&S Modelling Supplies. SHOP 9, WINNELLIE SHOPPING CENTRE, DARWIN (Next to the RAAF Base) P.O. Box 37095, WINNELLIE. 5789. Ph. (089) 818404

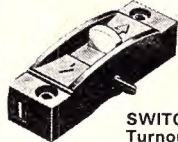


STREAMLINE

POINTS & CROSSINGS

There is something rather fine about PECO Streamline turnouts and crossings, they follow correct prototype practice and are suitable for all the popular makes of trains. They possess many splendid features, such as nickel silver rails integrally moulded with the detailed simulated wood grained sleeper bases to provide maximum strength.

The turnouts have pivoted blades with nickel silver contacts which incorporate a springing device giving easy positive action for immediate use - separate levers are not necessary for hand control, they are completely self contained units. All turnouts are designed for fitting the PECO Turnout Motor to the underside for remote control; being positioned underneath it is therefore invisible and adds greater realism to the appearance of the layout.



SWITCH for operating Turnout Motor

Black PL-16B Yellow PL-16Y
White PL-16W Red PL-16R

The prices shown in this advertisement are recommended prices only and there is no obligation for dealers to comply with the recommendation.

HO/00

Flexible Tracks

914mm (1 yd.) lengths

SL-100X Wood Sleepers, Nickel Silver Rails

..... \$3.45

SL-100S Wood Sleepers, Steel Rail

..... \$2.95

SL-100B Wood Sleepers, Brass Rail

..... \$2.75

SL-102X Concrete Sleepers N.S. Rail,

..... \$3.95

SL-102S Conc. Sleepers Steel Rail

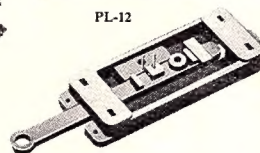
..... \$2.95

SL-102B Conc. Sleepers, Brass Rail

..... \$2.75

MOTOR ADAPTOR

PL-12



POINTS & CROSSINGS

SUPER UNIVERSAL POINTS

SL-86XX Right Hand Curved Point ..	\$12.50
SL-87XX Left Hand Curved Point ..	\$12.50
SL-88XX Right Hand 5' Radius Point ..	\$12.50
SL-89XX Left Hand 5' Radius Point ..	\$12.50
SL-90XX Double Slip Point ..	\$35.75
SL-91XX Right Hand 2' Radius Point ..	\$ 9.75
SL-92XX Left Hand 2' Radius Point ..	\$ 9.75
SL-93XX Short Crossing ..	\$ 8.95
SL-94XX Long Crossing ..	\$10.50
SL-95XX Right Hand 3' Radius Point ..	\$10.95
SL-96XX Left Hand 3' Radius Point ..	\$10.95
SL-97XX Short 'Y' Point ..	\$ 9.95
SL-98XX Long 'Y' Point ..	\$11.75
SL-99XX 3-way Medium Radius Point ..	\$29.50

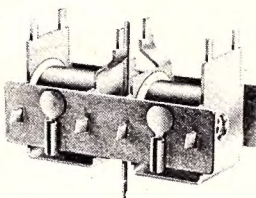
ELECTROFROG POINTS

SLE-86X Right Hand Curved Point ..	\$12.95
SLE-87X Left Hand Curved Point ..	\$12.95
SLE-88X Right Hand 5' Radius Point ..	\$12.50
SLE-89X Left Hand 5' Radius Point ..	\$12.50
SLE-91X Right Hand 2' Radius Point ..	\$ 9.95
SLE-92X Left Hand 2' Radius Point ..	\$ 9.95
SLE-95X Right Hand 3' Radius Point ..	\$11.50
SLE-96X Left Hand 3' Radius Point ..	\$11.50
SLE-97X Small Radius 'Y' Point ..	\$10.25
SLE-98X Large Radius 'Y' Point ..	\$11.95

NOTE: Old style Universal Points are still available on request.

MOTOR (Switch Machine) For operating Turnouts

PL-10



RATIO

AN EXPANDING RANGE OF KITS FOR THE 'N' GAUGE MODELLER

New lines just arrived in N

207 Flat Roof Station Canopy with ornamental supports approximate length 180mm	\$4.50
209 Station Platform with white painted edges and optional brick or stone facing - 45 x 228mm	3.50
210 Platform Ramps with white painted edges, optional brick or stone facing - 45 x 55mm approx.	Pr.
211 Telephone Poles, packet of 18	2.00
212 Lineside Huts, packet of 3	3.50
216 Flexible 3-bar white Fencing - 914mm	2.00
217 Flexible 3-bar black Fencing - 914mm	2.00

THE REST OF THE RATIO N RANGE IS:-

240 Vacuum formed Stone Sided Platform Kit	2.95
241 Vacuum formed Stone Bridge Kit	4.50
250 Signal Remote Control Kit	3.50
260 Home or Distant Signal Kit	1.65
262 Junction/Bracket Signal Kit	3.50
263 Ground Signal Kit	1.45

.....& for HO/00

502 Cattle Dock based on the one at Yeovil Pen Mill, Western Region of British Railways. A nicely detailed kit with all parts to make a cattle dock approximately 173 x 112mm	\$20.75
506 Water Tower - highly detailed kit for a rectangular iron tank on a brick tower with a stone base. The completed model is 64 x 32 x 80mm	\$16.50
F/419 Concrete Fence Posts, Wire & Fittings comprising 50 posts, 6 strands of wire, 5 each signs "Beware of Trains" & "No Livestock Beyond This Point", 10 gates with hasps & hinges, 5 standpipes and 15 cow pats	\$5.95
445 Wooden Staircase moulded in green plastic as supplied with Signal Box No. 500.	\$2.00
507 Grounded Van Body with sleepers, "clutter" etc. ..	\$4.35

Bring your layout to life WITH

MERTEN
FIGURES & ANIMALS



N
HO/00
Z
\$3.85

Regular Boxed Sets

SELECTIONS FROM THE HO/00 RANGE

812 Six men walking carrying bags	
820 Three groups of two tourists	
855 Three men and three ladies seated	
889 Blacksmith shoeing horse, helper with 2nd horse	
926 Six harvest workers in various poses	
963 Bridal party - 7 figures	
2407 Six cows and calves	
2408 Six skittish horses (riding type)	
2454 Children with playground equipment	
2466 Dogs & Cats	
2490 Four tennis players, umpire on stand, 2 ball boys	

Most of these numbers are also available in N and Z scales.



AMC

DISTRIBUTED PRODUCTS

from good hobby shops everywhere

For Trade & General Enquiries:-

AUSTRALIAN MODEL CRAFT CO.

Box 118, P.O., Albury, N.S.W. 2640

Phone (080) 21 2473